MY VISION

Hardware Manual
Rev. 1.00

CHAPTER'S INDEX

1. Premise

The hardware installation manual is unique for all types of Visualyser.

The manual

The installation manual is the instrument that allows the user to obtain information regarding the type of fixing, connections, as well as optional accessories, functions available in the terminals and connection cables to the device.

What is it used for?

The manual contains all notions, concepts and examples necessary for an easy and quick installation.

Premise

2. Essential information

The terminal is an appliance made up from a series of components, which due to their construction features MUST be used in a suitable way; moreover, due to their construction peculiarities, the terminal may behave in a way that could be interpreted as malfunctioning of the product and/or construction defects.

The displays used on the Visualyser terminals are active matrix defined as TFT (Thin Film Transistor).

One component that envisions certain attention when used is the Touch Screen.

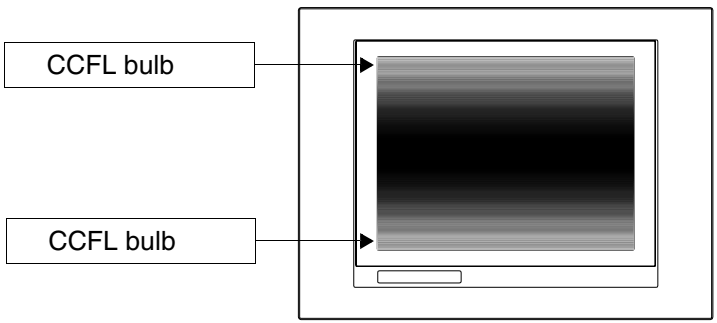
Below is a series of information regarding possible behaviour and correct use of the terminal.

If some of these notions are not put into practice, they may damage the terminal.

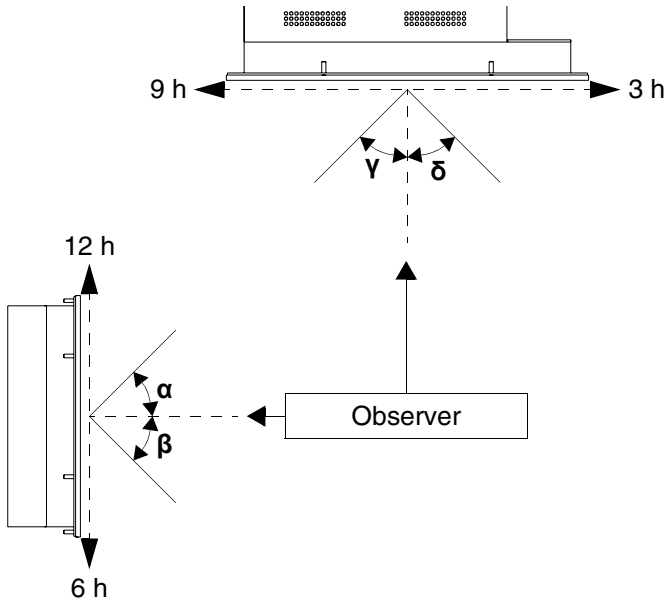
Graphical terminals

The LCD graphic terminals category with TFT type display can have LED back-lighting or with CCFL lamps.

In the displays with CCFL back-lighting, the brightness may be slightly uneven; it may be lighter in the area where the bulb is located.



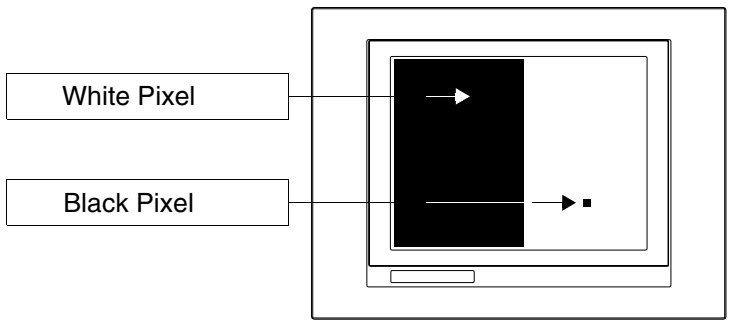
All displays have a certain visual angle within which to be positioned in order to have a correct view of the images. If the user is outside of the specified angle, he could see the images with colours inverted or with different tones to the original ones or not see any colour, etc. The visual angle can be slightly adjusted by acting on the display contrast.



The figure shown above shows the direction of the angles depending on the observation point. The table states the value of the display angles depending on the type of display.

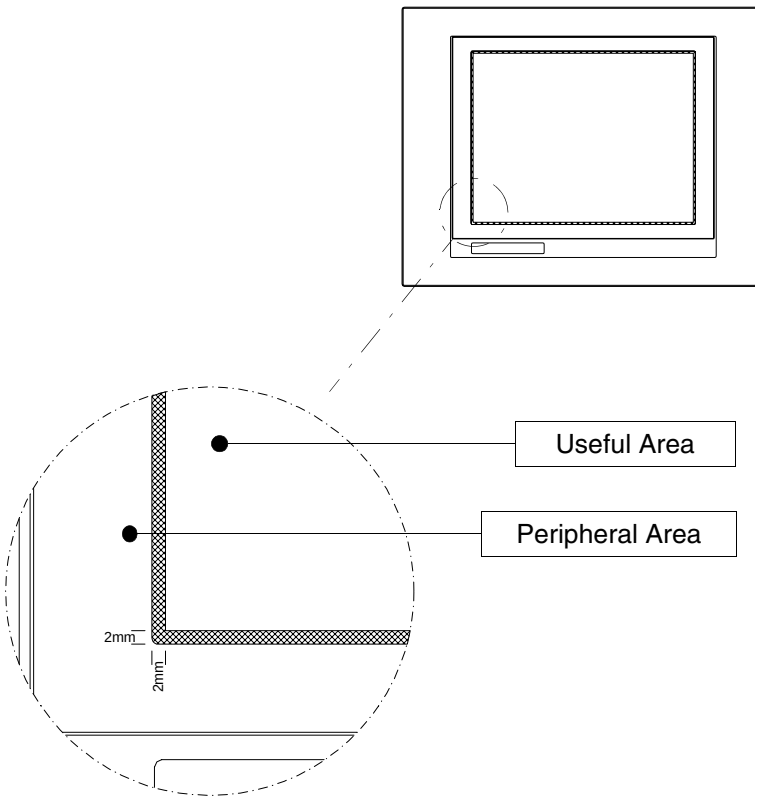
Display type	Direction (Hours)			
	12 - α	6 - β	9 - γ	3 - δ
TFT	80 Degrees	80 Degrees	70 Degrees	70 Degrees

This prerogative leads to a difference in display (while maintaining the same contrast and temperature) when the observers are at different distances with respect to the terminal.
Note that in some cases the displays can have some white pixels (always on) or black (always off). This phenomenon can be visible or invisible to the user depending on the colour displayed.



Touch screen

The touch screen is activated by applying a force equal to 200g indifferently to the use of a pen or finger.
A Peripheral Area of the touch screen exists that must never be stressed, especially with pointed objects (pens etc.). The glass in this area is very sensitive to pressing and is subject to breakage.



The peripheral area is about 2 mm per side and is outside of the sensitive area.

By stressing this area the terminal may be damaged.

3. Laying and shielding of cables

Electronic appliances are frequently used in the command and control systems of the home systems.
Electric interference caused by the functioning of these appliances can jeopardise the correct functioning and the life span of the electronic appliances present in the plant.
To allow the correct functioning of the electric and electronic appliances the presence of interference must be reduced.

Laying the cables

Remember to separate the measurement, control and communication cables from the power cables. Power cables laid near to and parallel to the communication cables cause coupling voltages that interfere with or destroy the electronic components.

Cable shielding

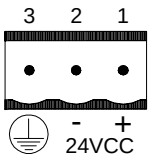
For connection of the communication signals, it is necessary to use suitable shielded cables (total shielding is recommended). The shielding must be connected to the earth potential.
The earthing of the home system must be carried out in compliance with all Standards in force.

4. Power supply

Use a 24VCC(18..32Vdc) feeder to power the terminal.

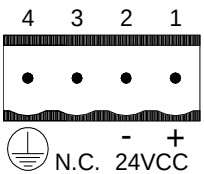
Connection pins

Table 0.1: Three-poles power supply connector

Connector	Pin	Meaning
	1	+24Vdc input power supply
	2	0Vdc input power supply
	3	Protection earth

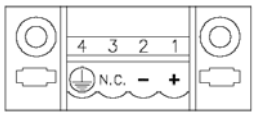
Check the connections before applying voltage.

Table 0.2: Four-poles power supply connector

Connector	Pin	Meaning
	1	+24Vdc input power supply
	2	0Vdc input power supply
	3	Not connected
	4	Protection earth

Check the connections before applying voltage.

Table 0.3: Four-poles power supply connector from panel

Connector	Pin	Meaning
	1	+24Vdc input power supply
	2	0Vdc input power supply
	3	Not connected
	4	Protection earth

Check the connections before applying voltage.

Wiring

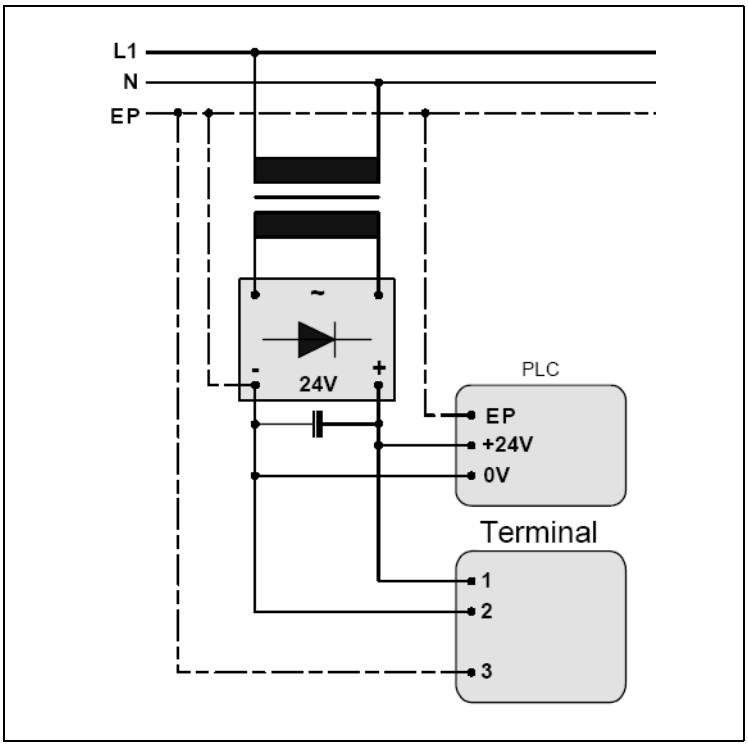
The power supply connector accepts wires with sections between 0.05 and 2.5mm² (30-12AWG) for rigid wires or sections from 0.05 to 1.5mm² (30-12AWG) for flexible wires. The flaying length must be between 6 and 7.5 mm (0.24-0.30in). The recommended coupling torque for the screws is 0.79Nm (7 lb in).

The data given refer to maximum values among those certified. The coupling torque is linked to the regulations applicable to the product and type of use.

Recommended connection

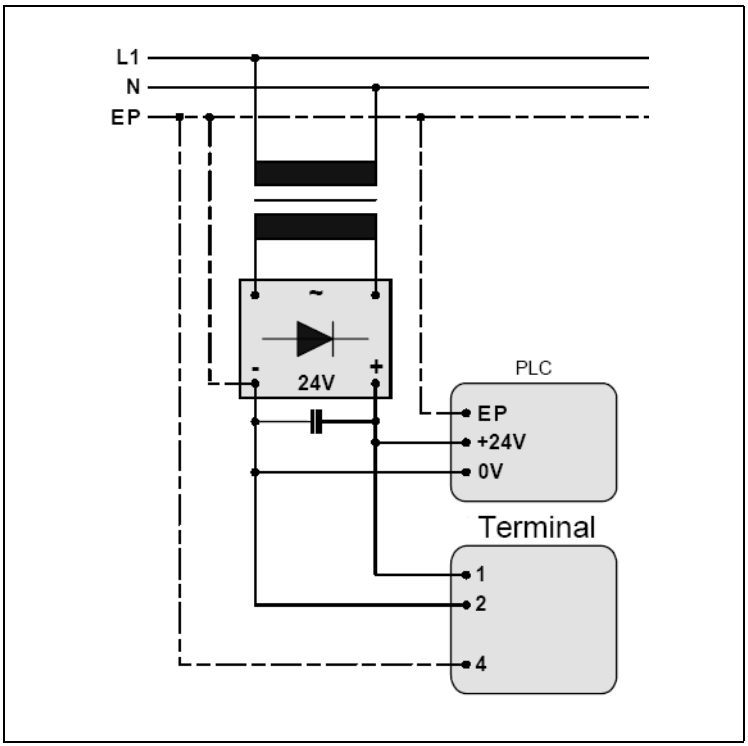
To prevent any damage to the terminal, carry out the connection as shown in the figure of tables 0.4 and 0.5:

Table 0.4: Terminal YT5/YT7/YTA/YXD : Power supply with 0Vcc connected to EP



Correct earthing is indispensable.

Table 0.5: Terminal YG4/YT4: Power supply with 0Vcc connected to EP

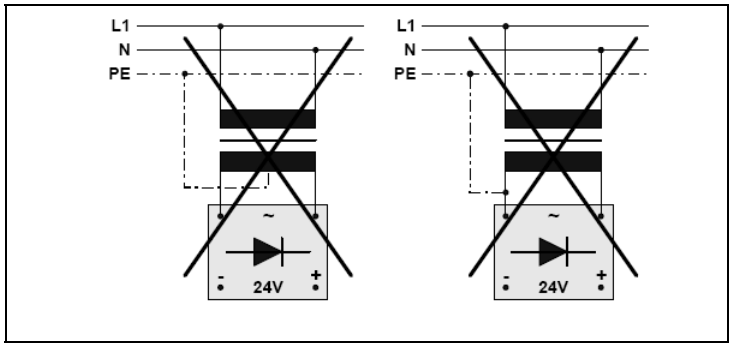


Correct earthing is indispensable.

Connection NOT to be made

To prevent any damage to the terminal **do not** carry out the connections represented in the figure shown below.

Table 0.6: Connections not to be made



The configurations stated above seriously damage some components of the terminal.

Power supply

5. YT4G Visualyser

Technical features

The table below lists the main technical features of the product in question.

	YT4G
Display	
Type	Graphic LCD TFT
Colors/levels	32 gray levels
Size	4,3" (widescreen)
Touch screen	Analog
Resolution (landscape)	480 x 272
Brightness	500 cd/m²
Backlight	White LED
System	
Runtime	Polymath EZbuilder / MyVision
RAM	64 MB
Flash memory	32 MB
CPU type	Intel PXA270
CPU clock	312MHz
Interfaces	
First integrated port	RS-485
Second integrated port	KNX (optional)
USB Host port	USB Host 1.1
USB Device port	-
Slot CardBus	-
Network	Ethernet 10/100 Mbit
Dimensions	
External (mm) (W x H x D)	180 x 140 x 35 (D=54 with KNX)
Technical data	
Power supply	18...32 Vcc
Consumption (24 Vcc)	~ 7 W
Protection level (with cover)	IP 40 (frontal)
Operating temperature	0...+50 °C
Storage temperature	-20...+65°C
Humidity (non condensing)	85%
Certifications	CE, cULus
Wall box	
Dimensions (mm) (W x H x D)	160 x 130 x 70

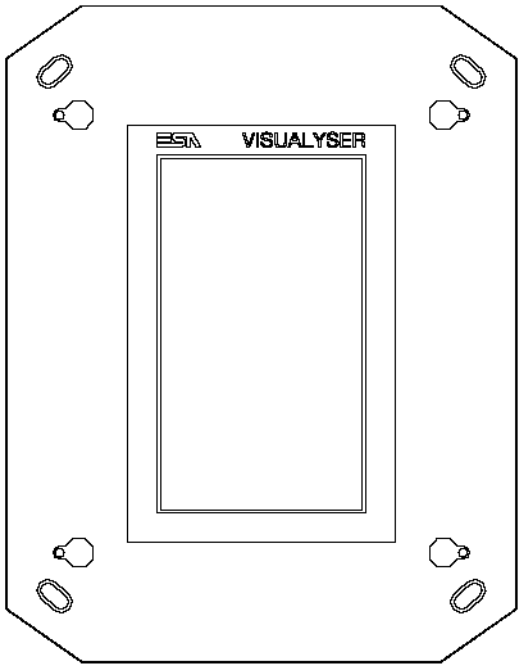
Product codes

The purchase codes with possible configurations of the product are given in the following table :

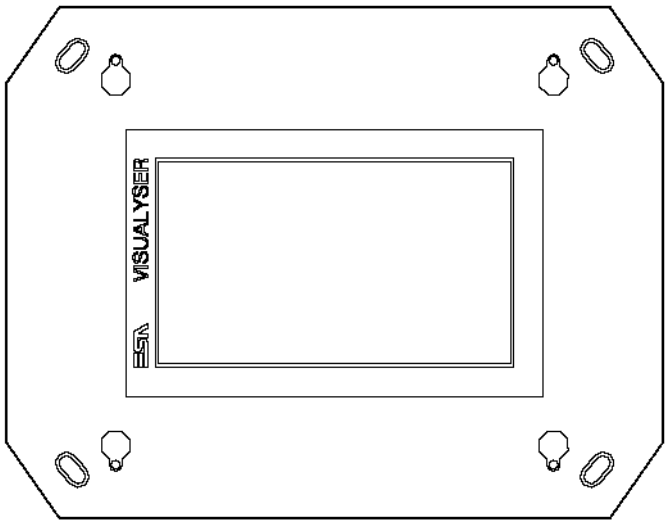
Product codes	
VISUALYSER (standard configuration)	**YT4G1010**
VISUALYSER with Konnex port	**YT4G1210**
Wall box	YB400

Front

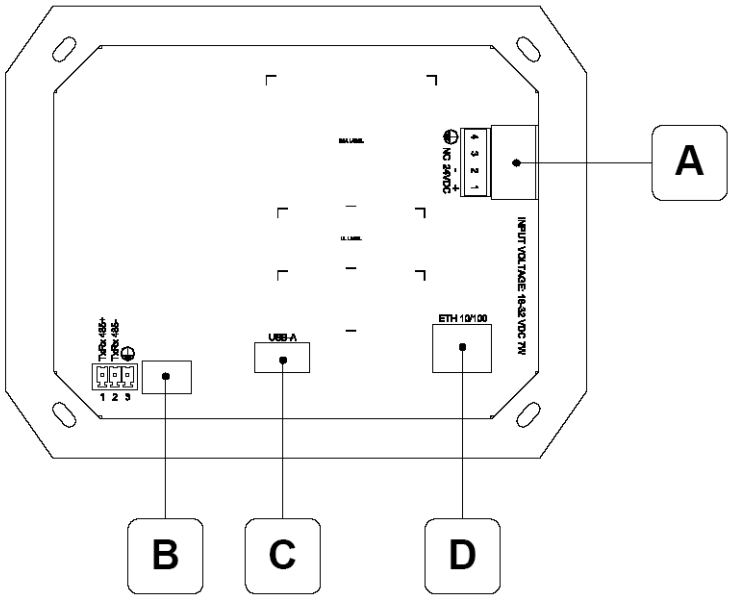
Vertical assembly



Horizontal assembly

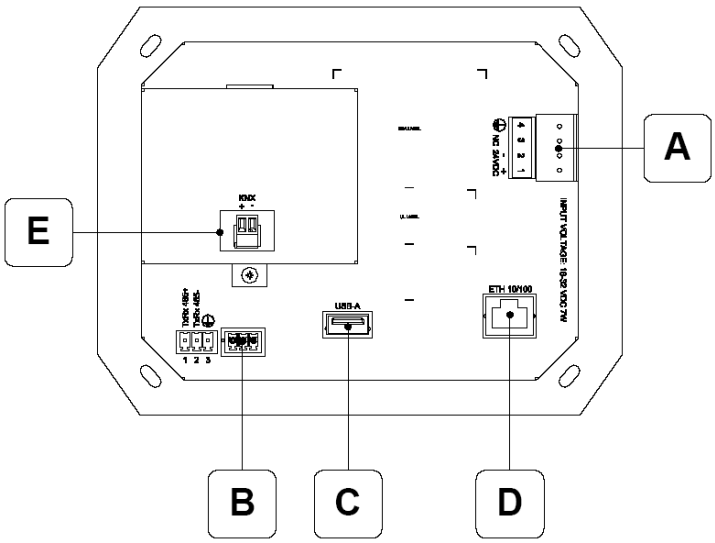


Rear



A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	C	**USB-A** Porta seriale USB. USB port. Port USB. USB-Schnittstelle. Puerto USB.
B	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos	D	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45

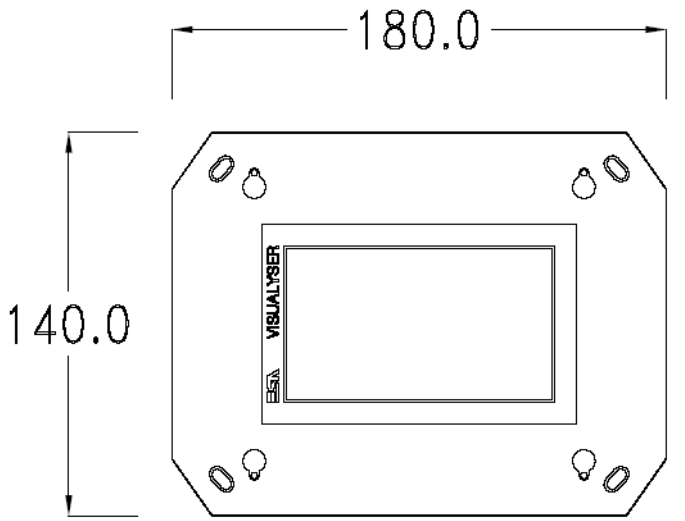
Products rear with KNX board (Konnex)



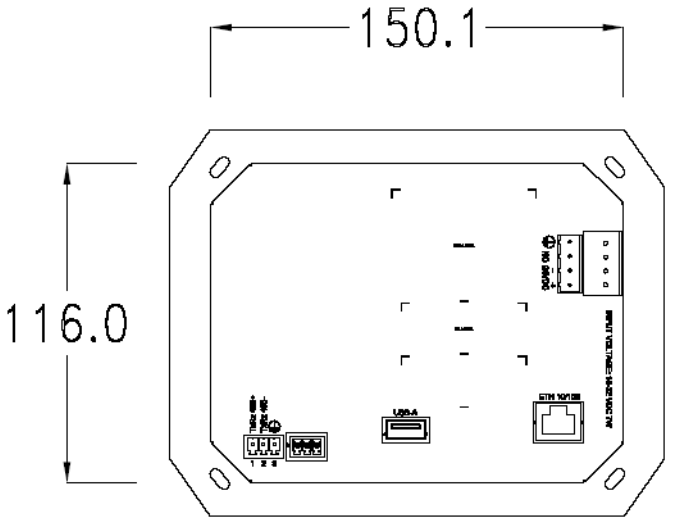
A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	D	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45
B	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos	E	**KNX** (opzionale / optional / option / option / opción) Porta seriale KONNEX. KONNEX serial port. Port sériel KONNEX. KONNEX - Schnittstelle. Puerto serie KONNEX.
C	**USB-A** Porta seriale USB. USB port. Port USB. USB-Schnittstelle. Puerto USB.		

Drilling template

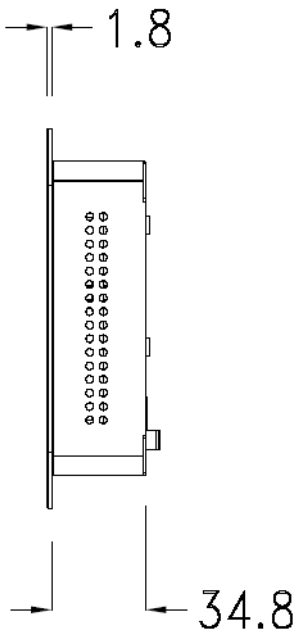
Front



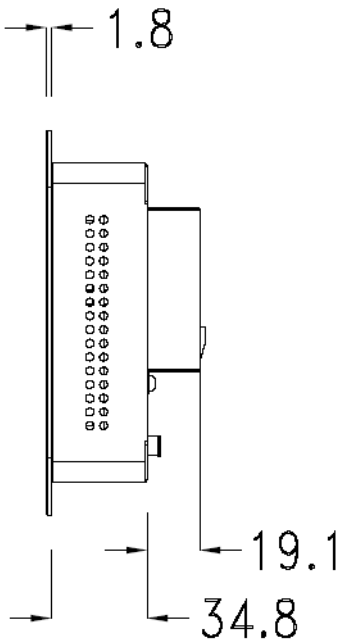
Rear



Side

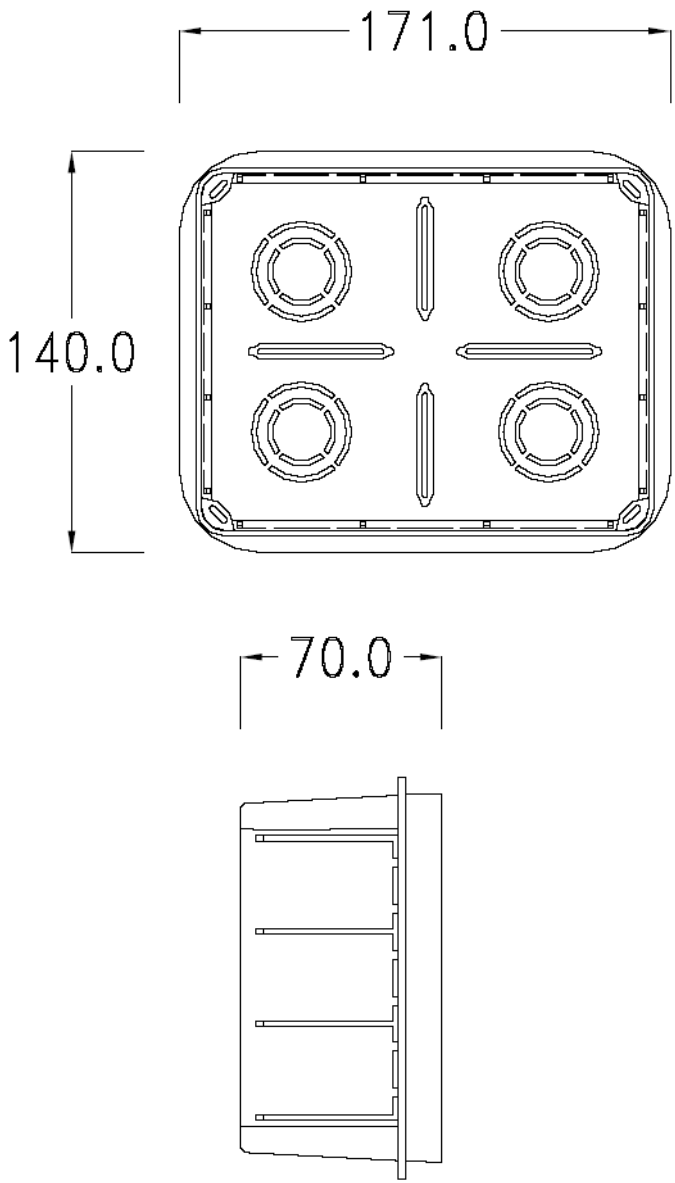


Products side with KNX board (Konnex)



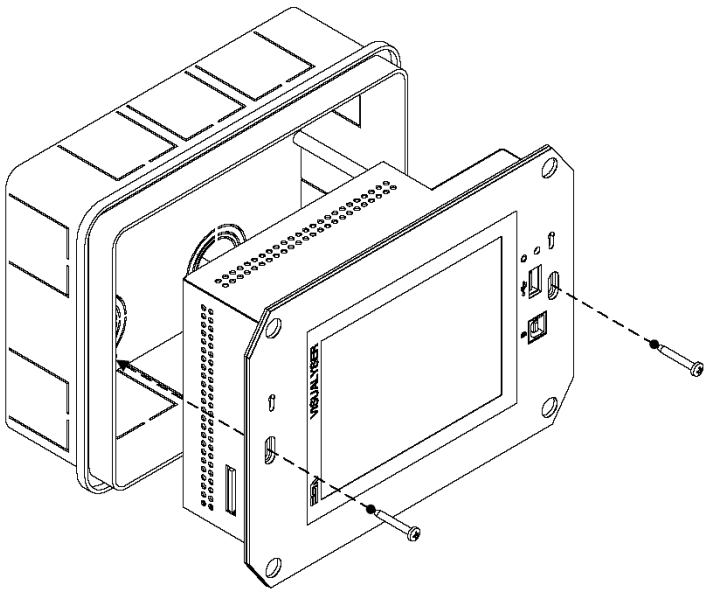
Wall box

ESA supplies the wall box (order code: YB400) for fixing the terminal :



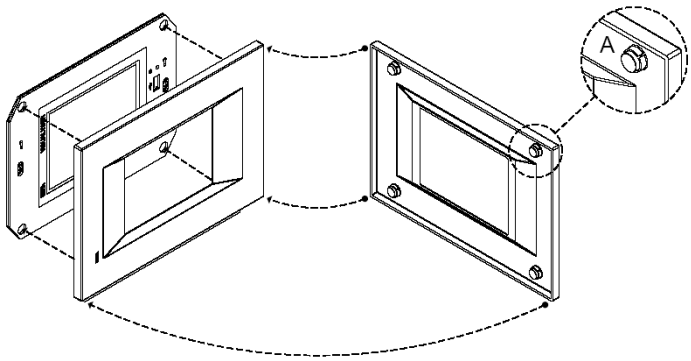
Panel mounting

After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.
For fixing use appropriate screws contained in the terminal packing kit :



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :

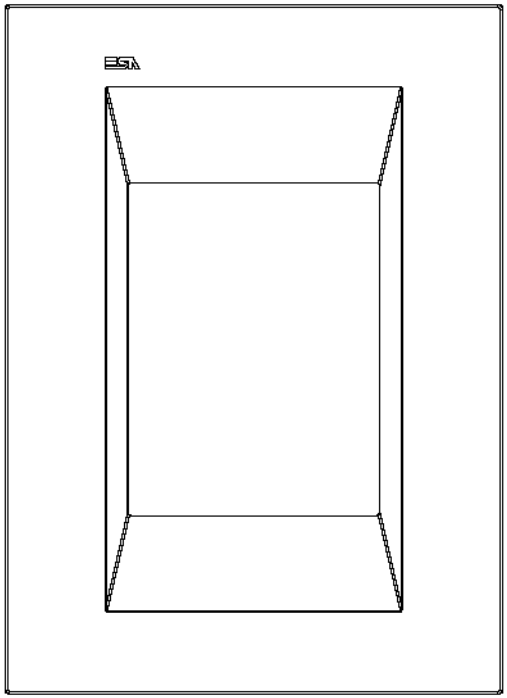


The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Classic" line plate, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

Plate Assembly **Vertical assembly**



Horizontal assembly

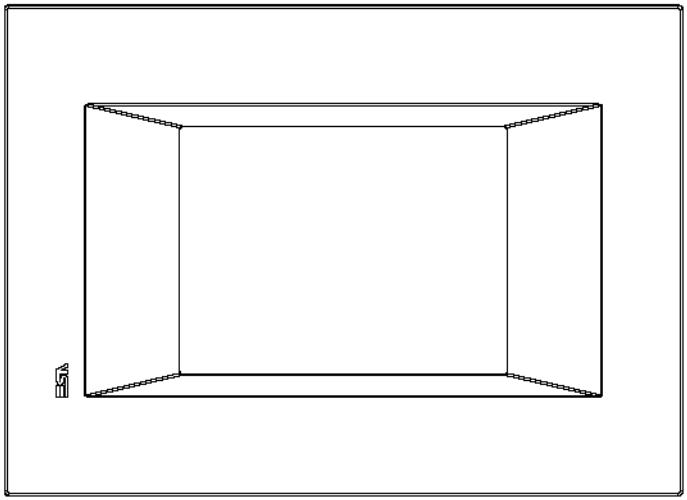
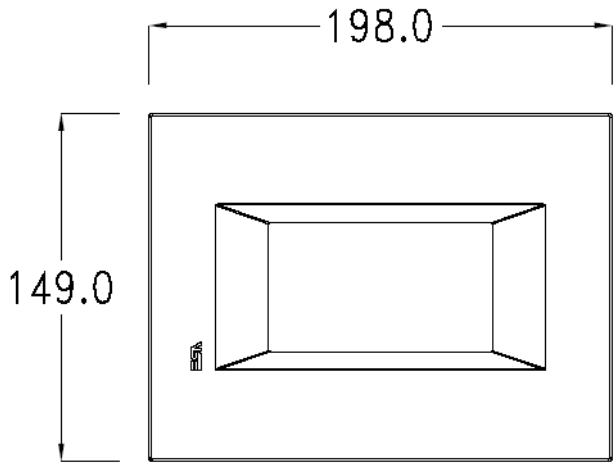
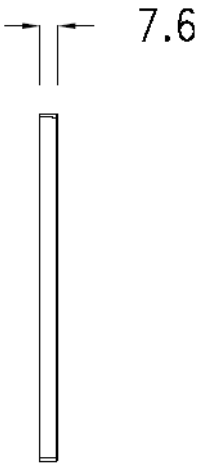


Plate dimensions

Front (Classic line plate)



Side (Classic line plate)

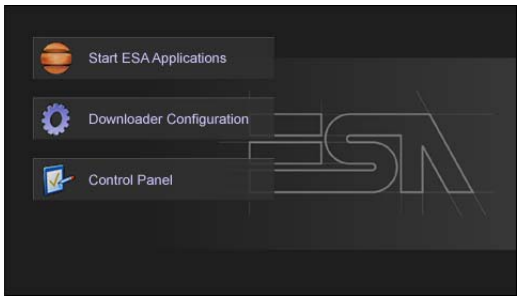


Order codes

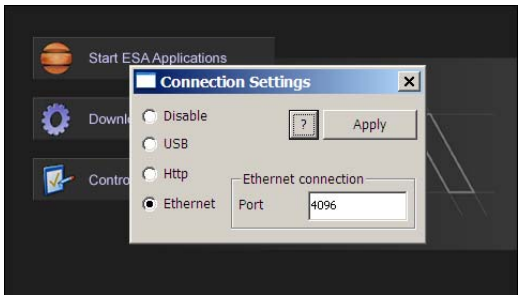
For the terminal described in this chapter, the codes of the purchasable plates are the following :

YC4LFXXXXXXX (Classic line)

Service page



Service page to which access is gained by inserting a button in the project (exit runtime).
- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured
- Disable disables the connection with the terminal
- USB enables the USB connection with the terminal
- Http enables the ethernet connection with the terminal through an http protocol
- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

Control panel

By clicking on each of these icons access is gained to the terminal configuration.

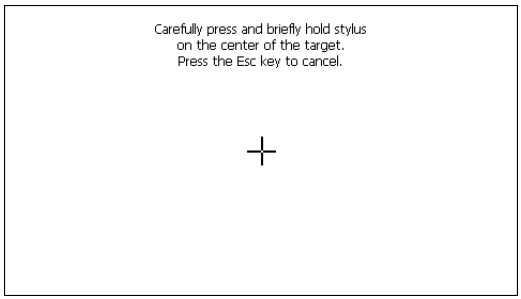
Stylus

The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.
If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

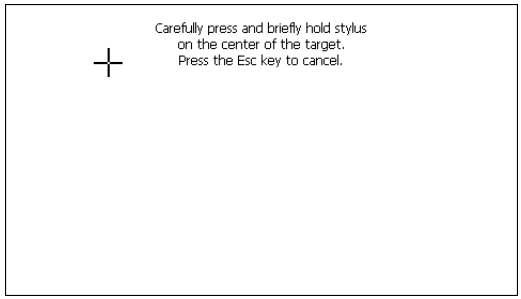
The procedure requires great attention because the precision of the keys' area depends from the calibration.

From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.

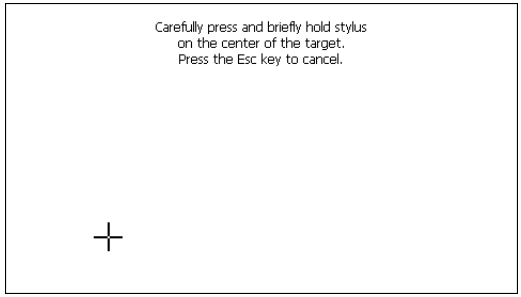
Step 1: touch the screen near the crosses



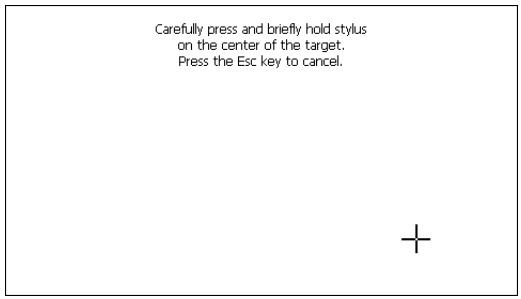
Step 2: touch the screen near the crosses



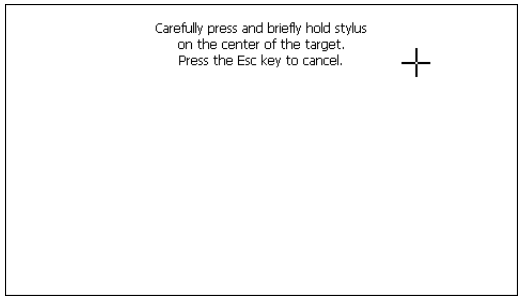
Step 3: touch the screen near the crosses



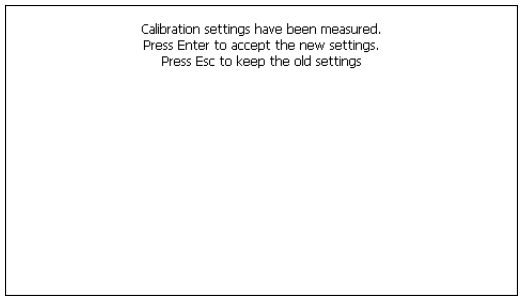
Step 4: touch the screen near the crosses



Step 5: touch the screen near the crosses



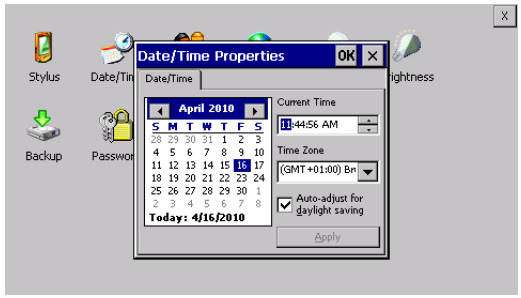
Step 6
Touch anywhere on the screen to end calibration.



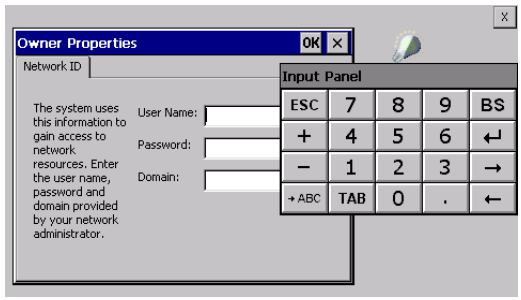
The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date/Time

From here it is possible to amend: date, time and time zone. By enabling the “automatically adjust clock for daylight saving” check, the time is automatically updated at BST or GMT.



Owner

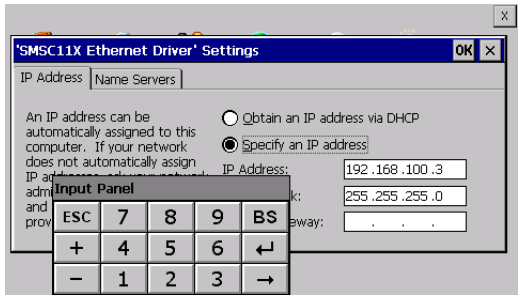


This information is used by Windows CE to access the network resources.
Username: enter the user name to access the network
Password: enter the password to access the network
Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

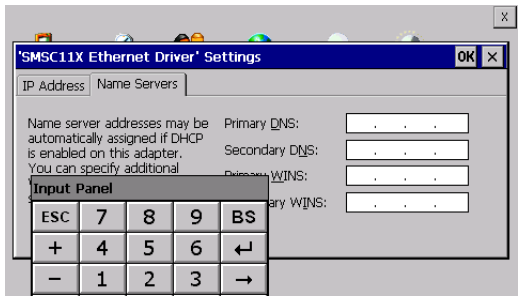
IP address



Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)
Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

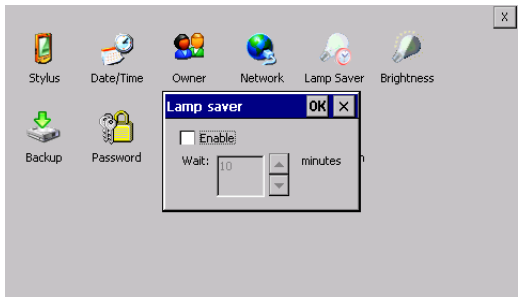
Name servers



If necessary, the parameters relating to the relative DNS or AL WINS must be entered

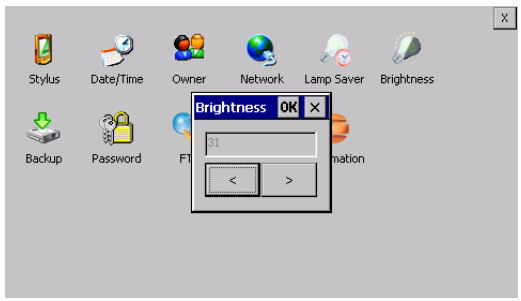
In case the above data is unknown, contact the network administrator.

Lamp Saver



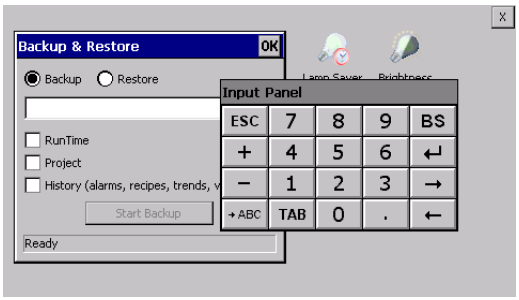
By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness



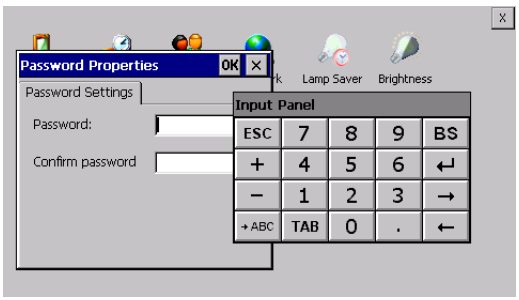
The Brightness allows regulating the brightness of the display lamp.

Backup



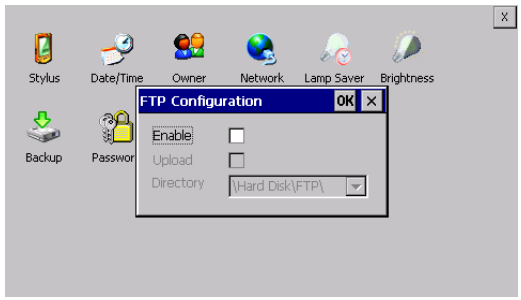
A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History.
It is essential to tick at least one of the components to be exported and choose a path where to save the file.
The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password



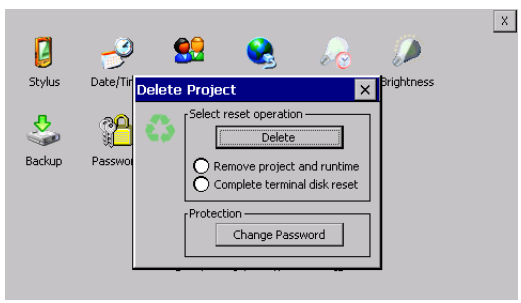
The Password option allows assigning a password to the terminal.
The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

FTP



The “FTP” acronym means “Files Transfer Protocol”. It gives the user the possibility to enable and disable the “FTP Server” service of the panel from any other device (PC,XS,IT,YT) connected to the network.
This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled :

Reset

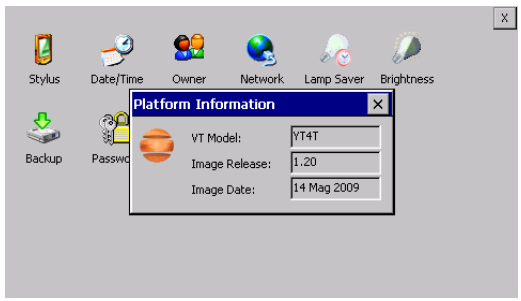


“Reset” is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled.
The user can choose from 2 options :

-“Remove project and runtime” -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.

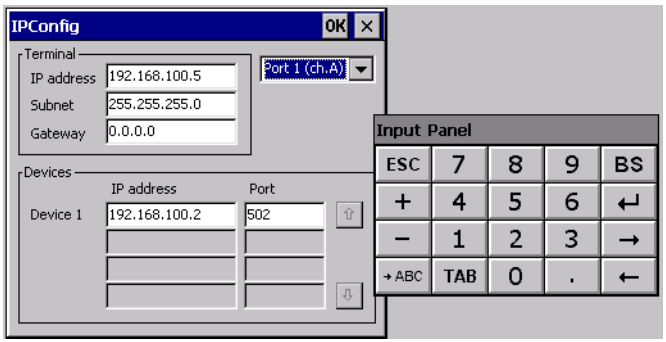
-“Complete terminal disk reset” -> choosing this option, the whole content of the “Hard Disk” folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information



Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config



By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.

The function “IP Config” is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).
By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.

6. YT4T Visualyser

Technical features

The table below lists the main technical features of the product in question.

	YT4T
Display	
Type	Graphic LCD TFT
Colors/levels	65.536 colors
Size	4,3" (widescreen)
Touch screen	Analog
Resolution (landscape)	480 x 272
Brightness	500 cd/m²
Backlight	White LED
System	
Runtime	Polymath EZbuilder / MyVision
RAM	64 MB
Flash memory	32 MB
CPU type	Intel PXA270
CPU clock	312MHz
Interfaces	
First integrated port	RS-485
Second integrated port	KNX (optional)
USB Host port	USB Host 1.1
USB Device port	-
Slot CardBus	-
Network	Ethernet 10/100 Mbit
Dimensions	
External (mm) (W x H x D)	180 x 140 x 35 (D=54 with KNX)
Technical data	
Power supply	18...32 Vcc
Consumption (24 Vcc)	~ 7 W
Protection level (with cover)	IP 40 (frontal)
Operating temperature	0...+50 °C
Storage temperature	-20...+65°C
Humidity (non condensing)	85%
Certifications	CE, cULus
Wall box	
Dimensions (mm) (W x H x D)	160 x 130 x 70

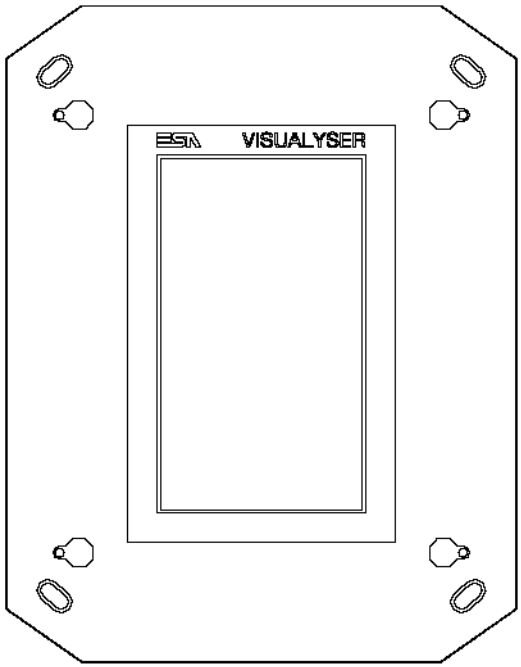
Product codes

The purchase codes with possible configurations of the product are given in the following table :

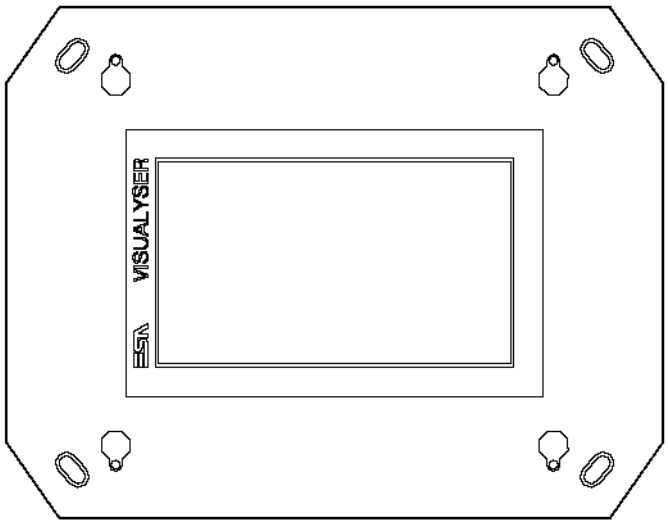
Product codes	
VISUALYSER (standard configuration)	**YT4T1010**
VISUALYSER with Konnex port	**YT4T1210**
Wall box	YB400

Front

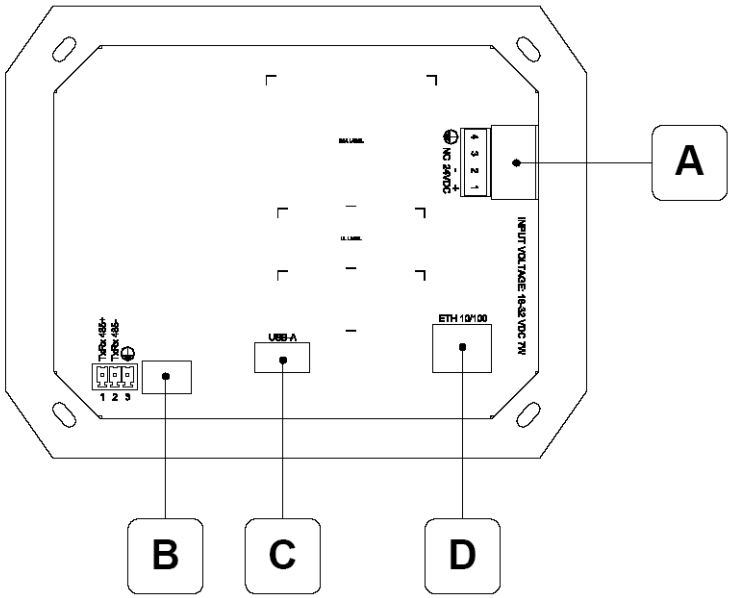
Vertical assembly



Horizontal assembly

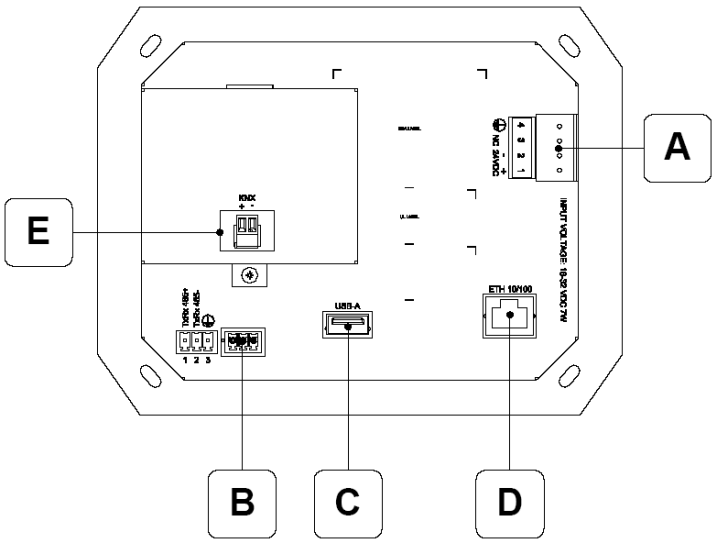


Rear



A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	C	**USB-A** Porta seriale USB. USB port. Port USB. USB-Schnittstelle. Puerto USB.
B	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos	D	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45

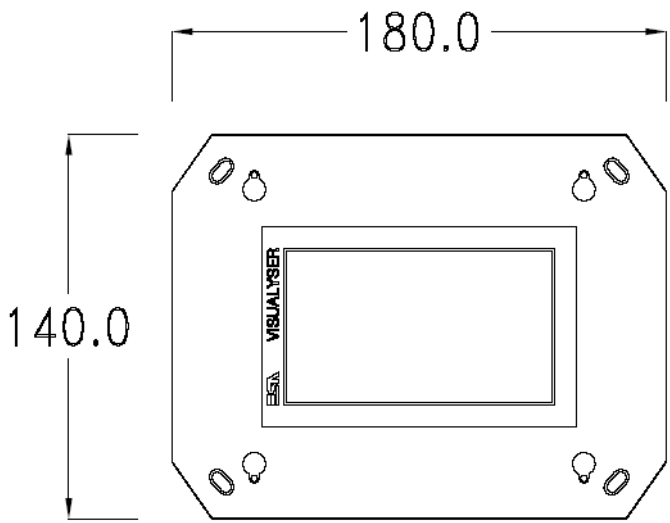
Products rear with KNX board (Konnex)



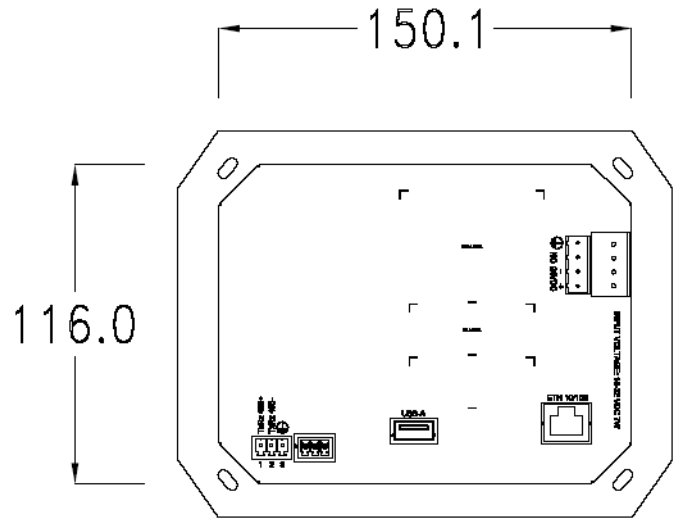
A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	D	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45
B	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos	E	**KNX** (opzionale / optional / option / option / opción) Porta seriale KONNEX. KONNEX serial port. Port sériel KONNEX. KONNEX - Schnittstelle. Puerto serie KONNEX.
C	**USB-A** Porta seriale USB. USB port. Port USB. USB-Schnittstelle. Puerto USB.		

Drilling template

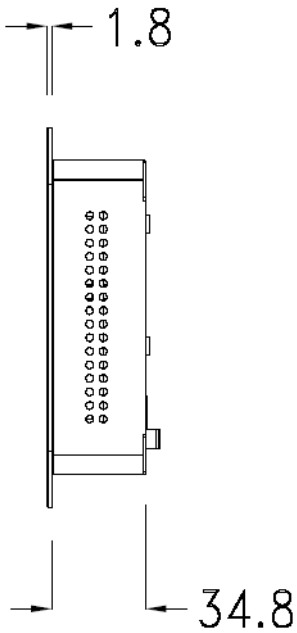
Front



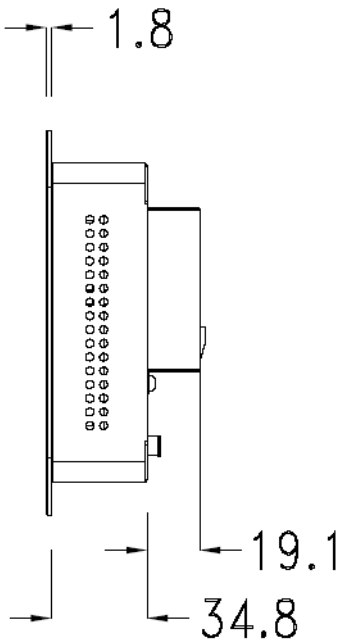
Rear



Side

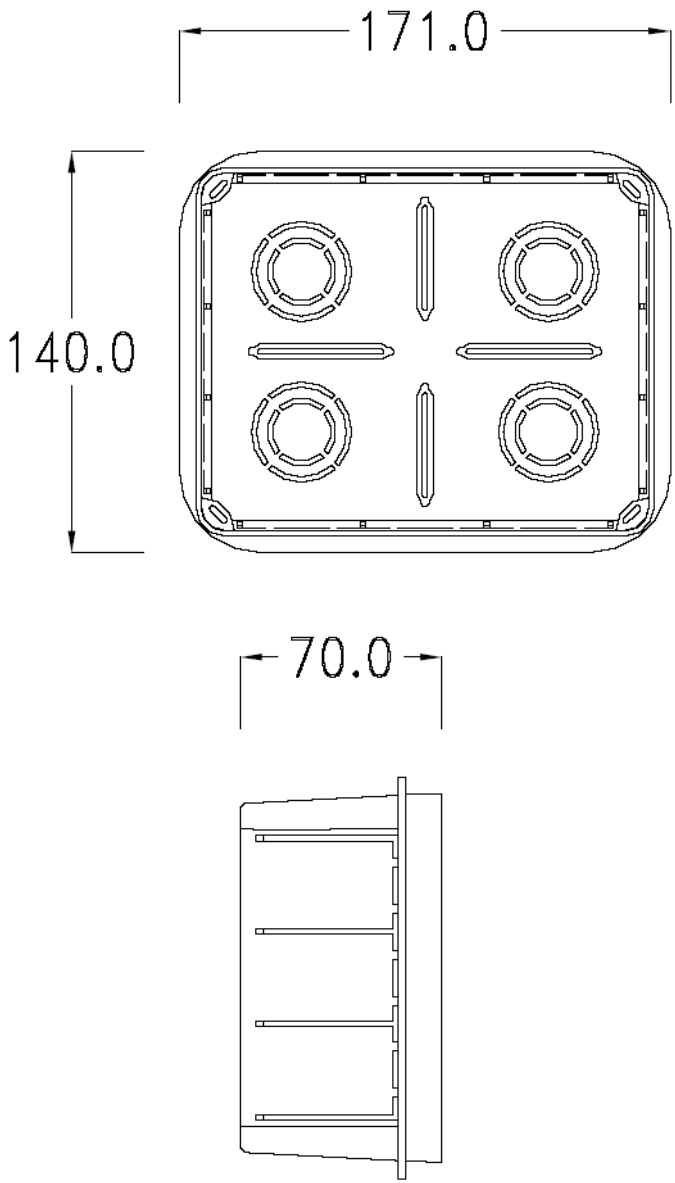


Products side with KNX board (Konnex)



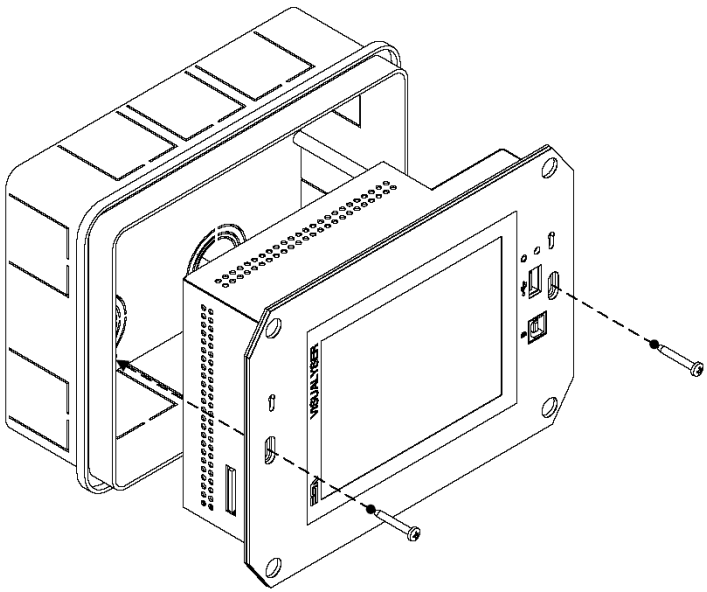
Wall box

ESA supplies the wall box (order code: YB400) for fixing the terminal :



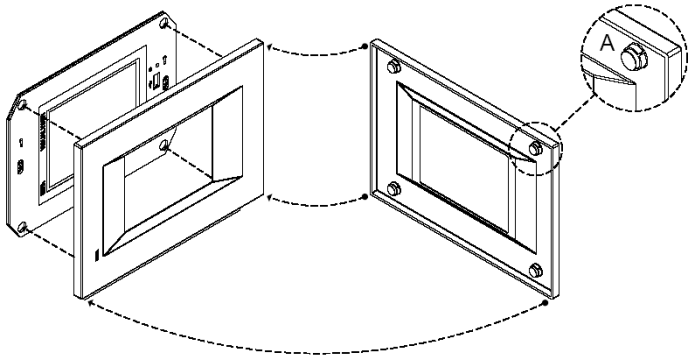
Panel mounting

After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.
For fixing use appropriate screws contained in the terminal packing kit :



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :

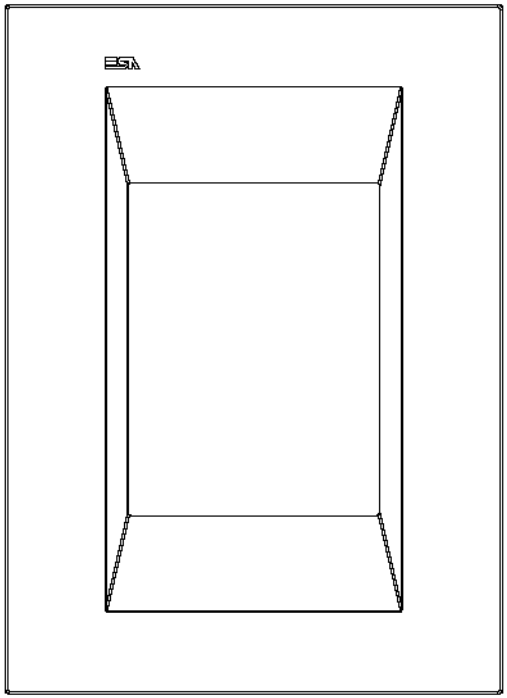


The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Classic" line plate, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

Plate Assembly **Vertical assembly**



Horizontal assembly

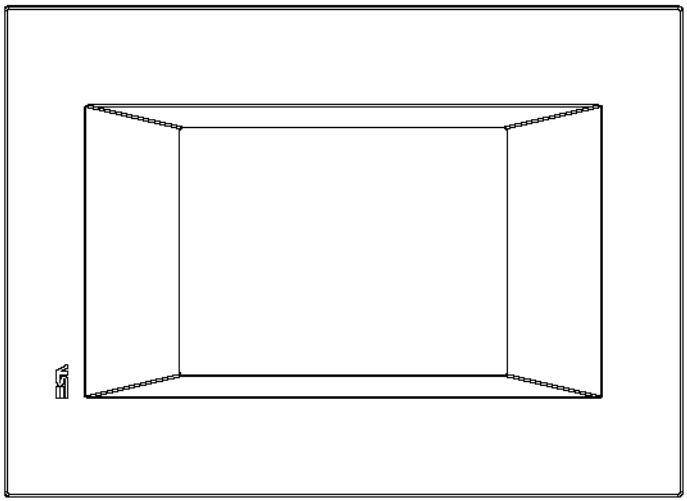
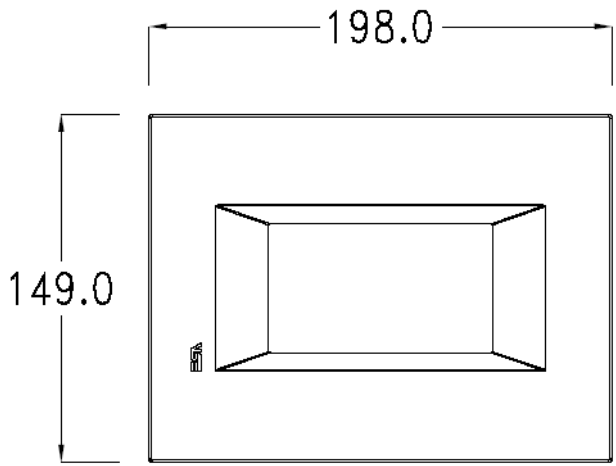
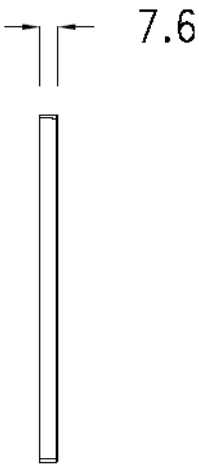


Plate dimensions

Front (Classic line plate)



Side (Classic line plate)

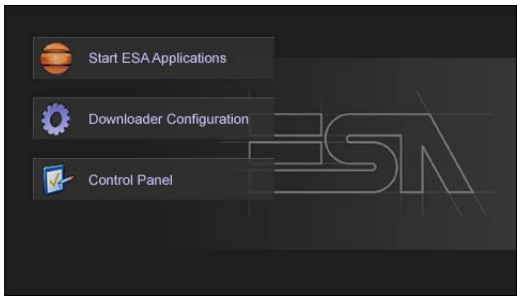


Order codes

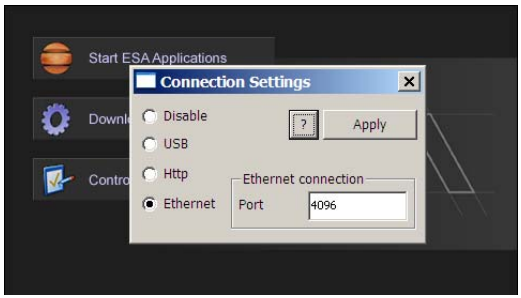
For the terminal described in this chapter, the codes of the purchasable plates are the following :

YC4LFXXXXXXX (Classic line)

Service page

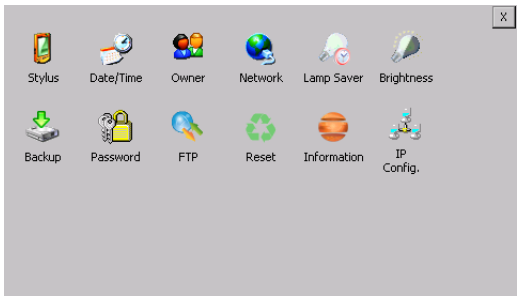


Service page to which access is gained by inserting a button in the project (exit runtime).
- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured
- Disable disables the connection with the terminal
- USB enables the USB connection with the terminal
- Http enables the ethernet connection with the terminal through an http protocol
- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

Control panel



By clicking on each of these icons access is gained to the terminal configuration.

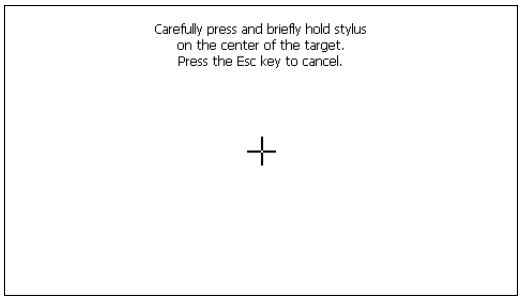
Stylus

The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.
If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

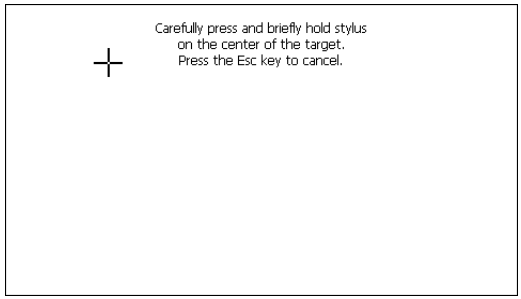
The procedure requires great attention because the precision of the keys' area depends from the calibration.

From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.

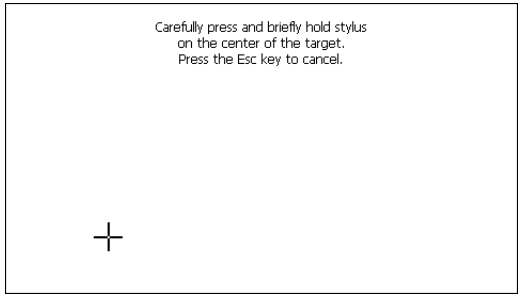
Step 1: touch the screen near the crosses



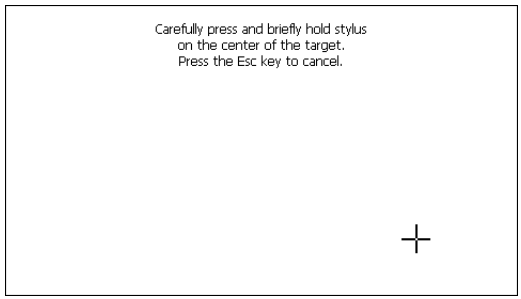
Step 2: touch the screen near the crosses



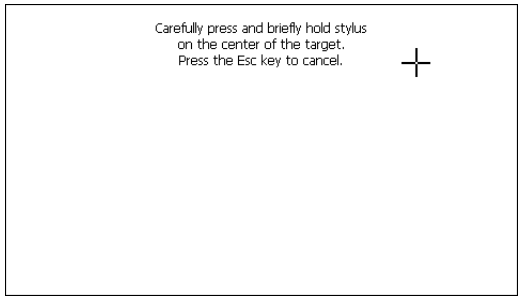
Step 3: touch the screen near the crosses



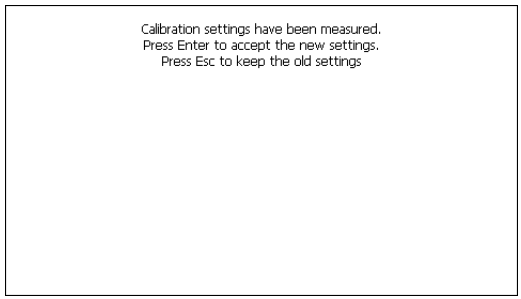
Step 4: touch the screen near the crosses



Step 5: touch the screen near the crosses



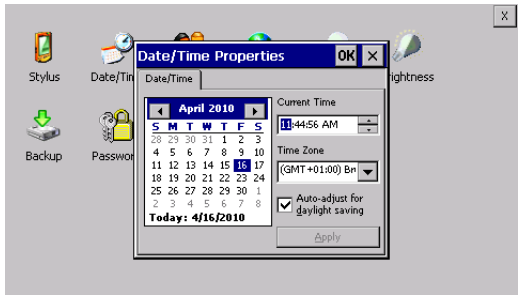
Step 6
Touch anywhere on the screen to end calibration.



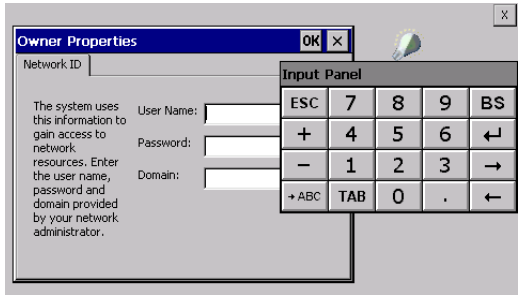
The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date/Time

From here it is possible to amend: date, time and time zone. By enabling the “automatically adjust clock for daylight saving” check, the time is automatically updated at BST or GMT.



Owner

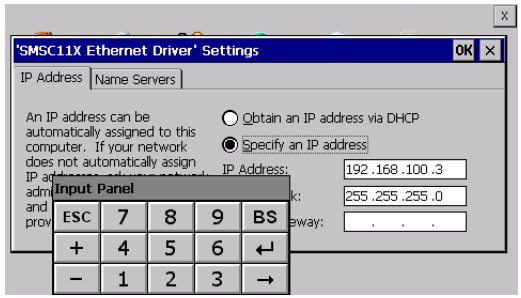


This information is used by Windows CE to access the network resources.
Username: enter the user name to access the network
Password: enter the password to access the network
Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

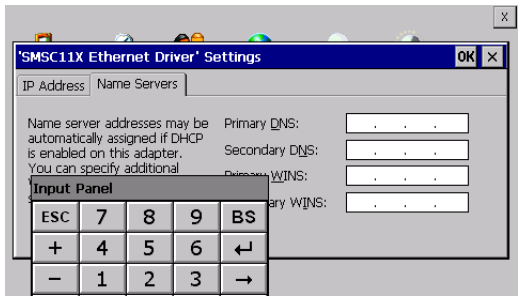
IP address



Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)
Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

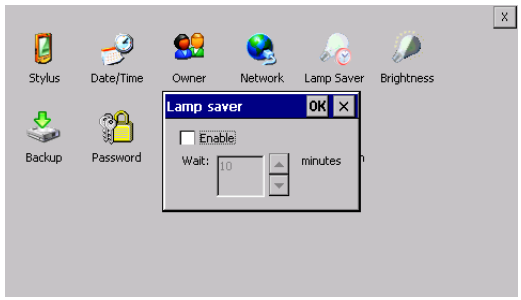
Name servers



If necessary, the parameters relating to the relative DNS or AL WINS must be entered

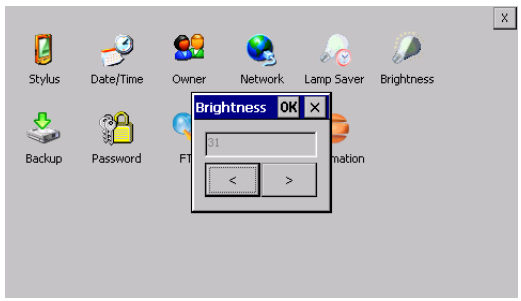
In case the above data is unknown, contact the network administrator.

Lamp Saver



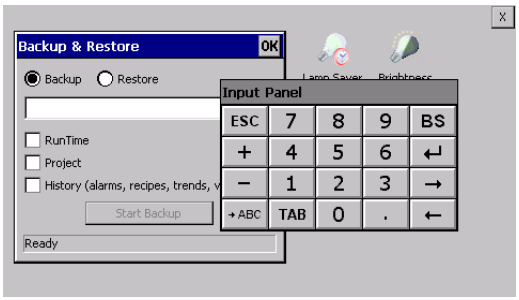
By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness



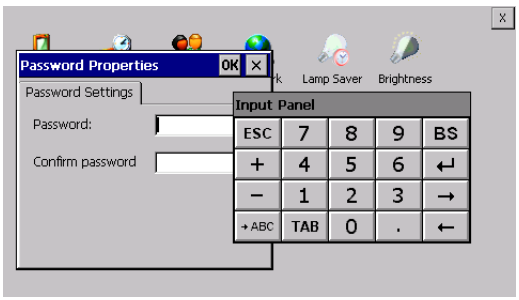
The Brightness allows regulating the brightness of the display lamp.

Backup



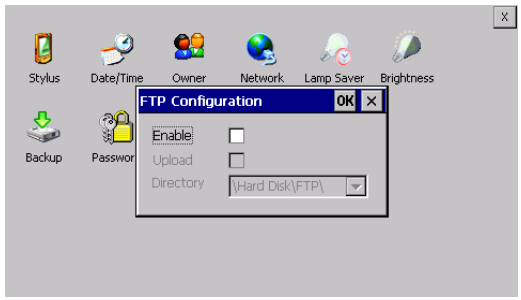
A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History.
It is essential to tick at least one of the components to be exported and choose a path where to save the file.
The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password



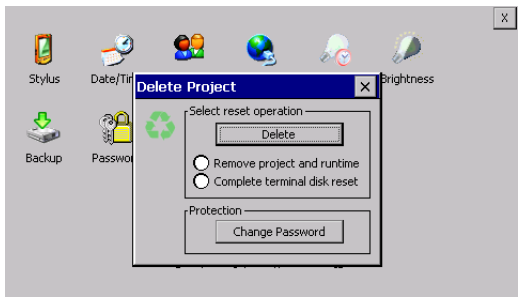
The Password option allows assigning a password to the terminal.
The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

FTP



The “FTP” acronym means “Files Transfer Protocol”. It gives the user the possibility to enable and disable the “FTP Server” service of the panel from any other device (PC,XS,IT,YT) connected to the network.
This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled :

Reset

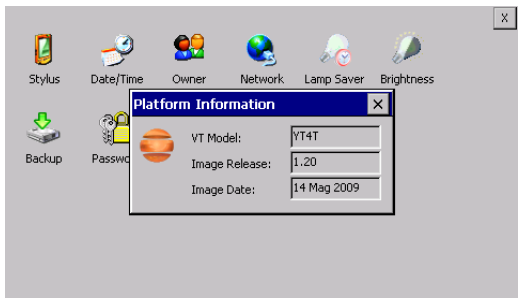


“Reset” is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled.
The user can choose from 2 options :

-“Remove project and runtime” -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.

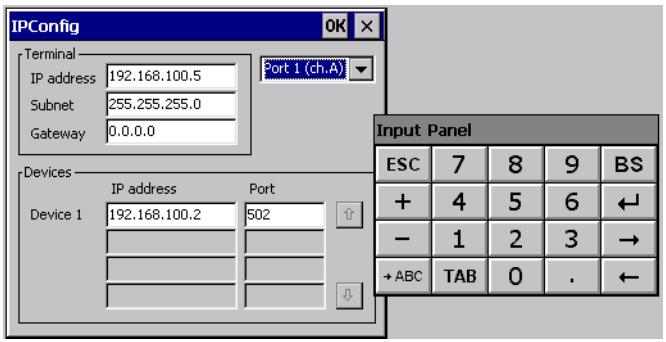
-“Complete terminal disk reset” -> choosing this option, the whole content of the “Hard Disk” folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information



Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config



By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.

The function “IP Config” is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).
By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.

7. YT5T Visualyser

Technical features

The table below lists the main technical features of the product in question.

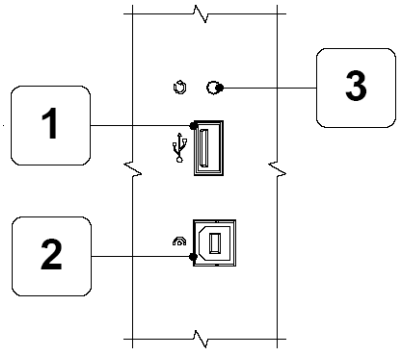
	YT5T
Display	
Type	Graphic LCD TFT
Colors/levels	65.536 colors
Size	5,7"
Touch screen	Analog
Resolution (landscape)	320 x 240
Brightness	300 cd/m²
Backlight	White LED
System	
Runtime	Polymath EZbuilder / MyVision
RAM	64 MB
Flash memory	32 MB
CPU type	Intel PXA270
CPU clock	520MHz
Interfaces	
First integrated port	RS-485
Second integrated port	KNX (optional)
USB Host port	USB Host 1.1 (frontal)
USB Device port	USB Device 1.1 (frontal)
Slot CardBus	SD/MMC
Network	Ethernet 10/100 Mbit
Dimensions	
External (mm) (W x H x D)	222 x 163 x 60
Technical data	
Power supply	18...32 Vcc
Consumption (24 Vcc)	~ 7 W
Protection level (with cover)	IP 40 (frontal)
Operating temperature	0...+50 °C
Storage temperature	-20...+65°C
Humidity (non condensing)	85%
Certifications	CE, cULus
Wall box	
Dimensions (mm) (W x H x D)	216 x 168 x 73

Product codes

The purchase codes with possible configurations of the product are given in the following table :

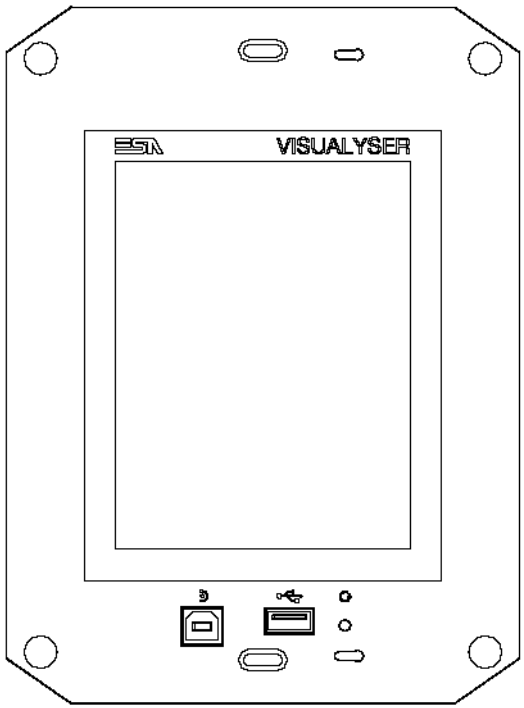
Product codes	
VISUALYSER (standard configuration)	**YT5T1010**
VISUALYSER with Konnex port	**YT5T1210**
Wall box	YB500

Front

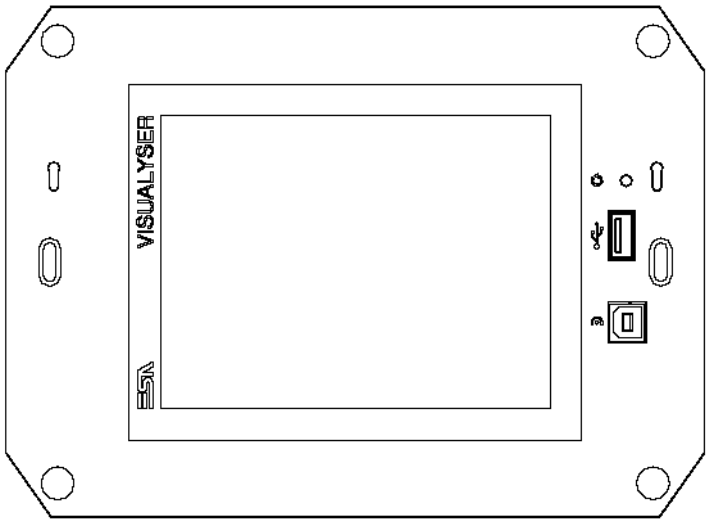


1	Porta seriale USB USB port Port USB USB-Schnittstelle Puerto USB	3	Pulsante di reset Reset button Bouton de reset Reset-Taste Tecla de reset
2	Porta seriale per il trasferimento del progetto Serial port to transfer the project Port sériel pour le transfert du projet Serielle Schnittstelle für die Projektübertragung Puerto serie para la trasferencia del proyecto		

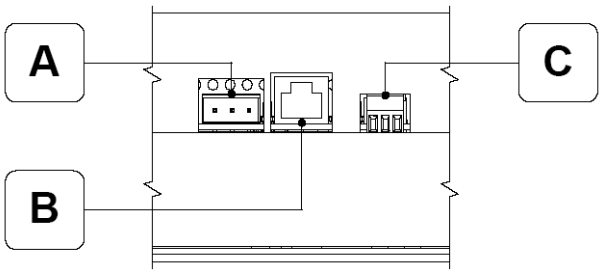
Vertical assembly

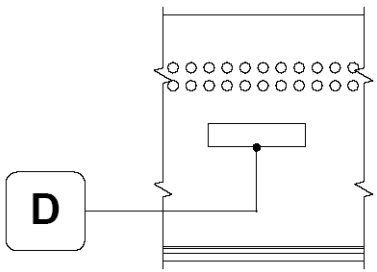


Horizontal assembly



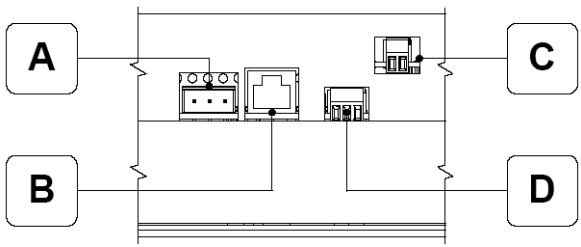
Rear

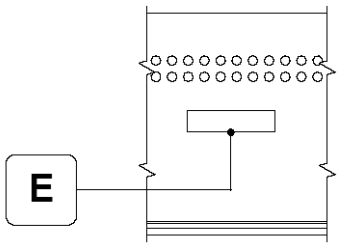




A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	C	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos
B	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45	D	**SD/MMC (Push-Push System)** Premere per inserire / Premere per estrarre Push-in / Push-out Pousser pour insérer / Pousser pour extraire Drücken - Karte einfügen / Drücken - Karte entnehmen Se inserta apretando / Se extrae apretando

Products rear with KNX board (Konnex)

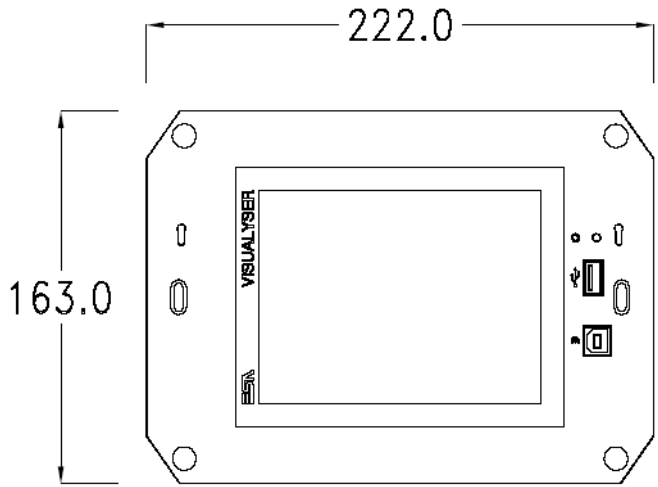




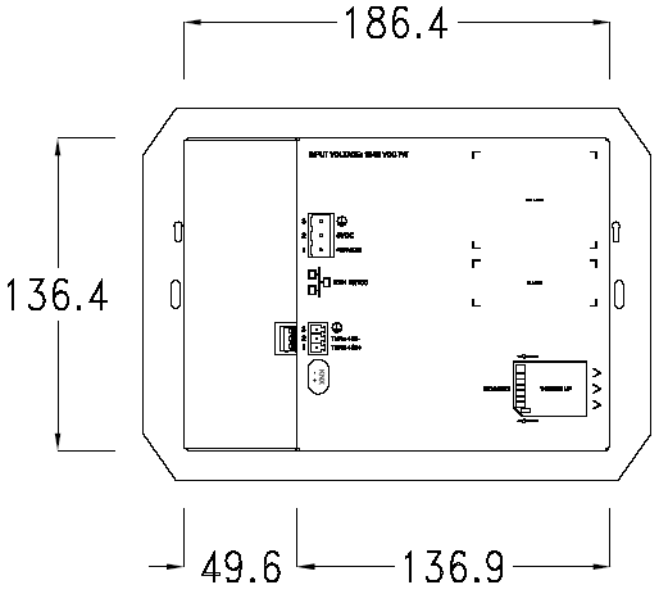
A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	D	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos
B	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45	E	**SD/MMC (Push-Push System)** Premere per inserire / Premere per estrarre Push-in / Push-out Pousser pour insérer / Pousser pour extraire Drücken - Karte einfügen / Drücken - Karte entnehmen Se inserta apretando / Se extrae apretando
C	**KNX** (opzionale / optional / option / option / opción) Porta seriale KONNEX. KONNEX serial port. Port sériel KONNEX. KONNEX - Schnittstelle. Puerto serie KONNEX.		

Drilling template

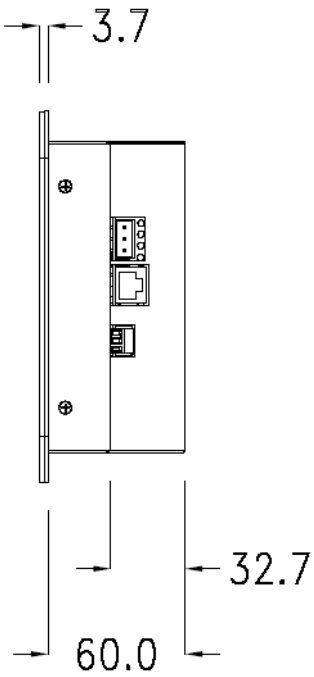
Front



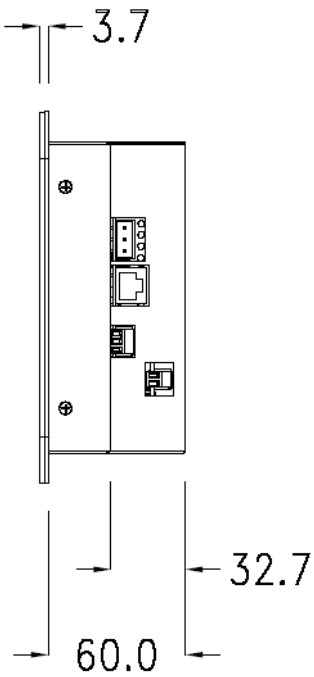
Rear



Side

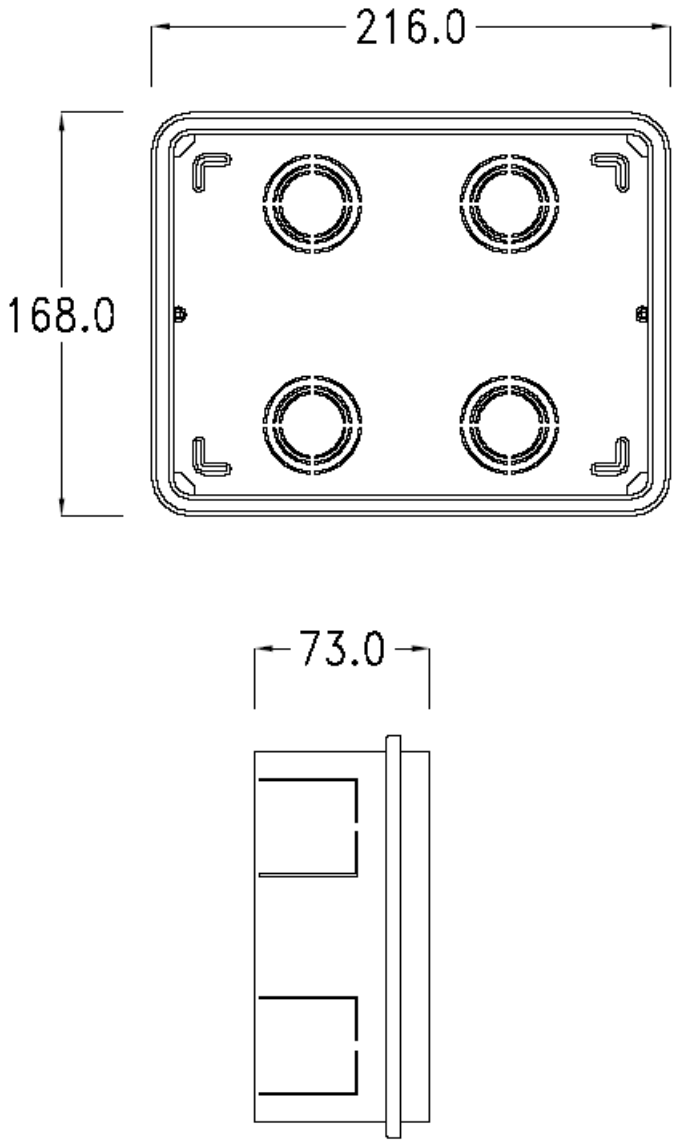


Products side with KNX board (Konnex)



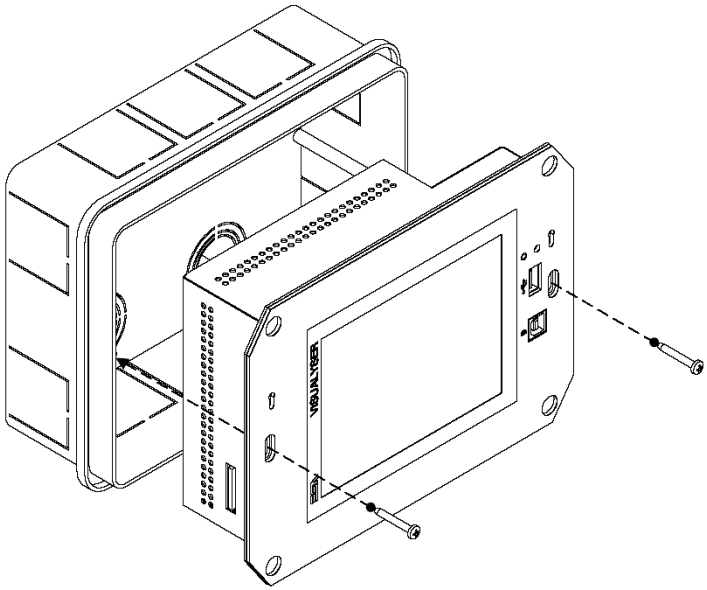
Wall box

ESA supplies the wall box (order code: YB500) for fixing the terminal :



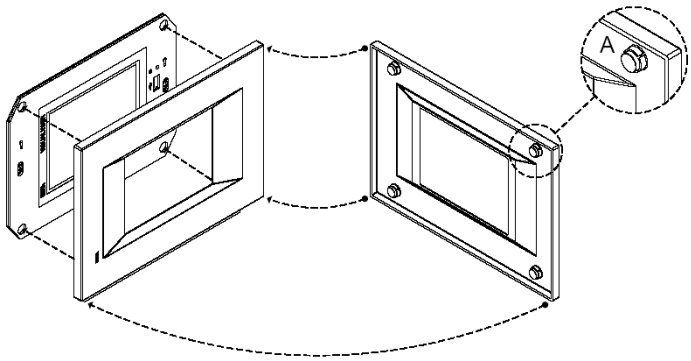
Panel mounting

After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.
For fixing use appropriate screws contained in the terminal packing kit :



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :



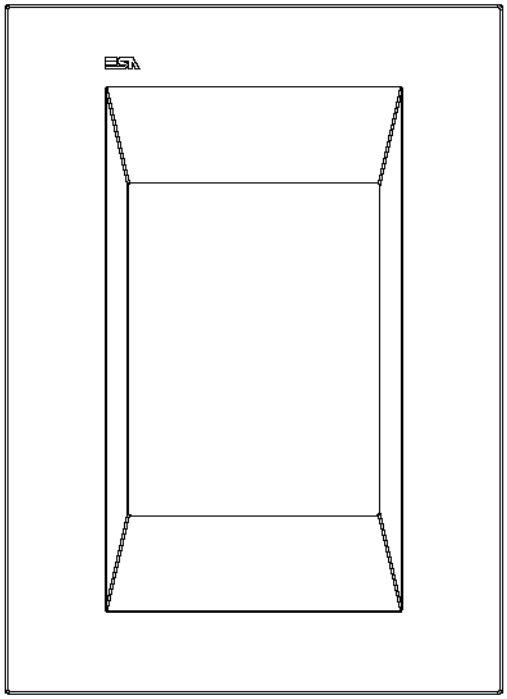
The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Classic", "Prime" and "Vogue" lines plates, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

Plate Assembly

Vertical assembly



Horizontal assembly

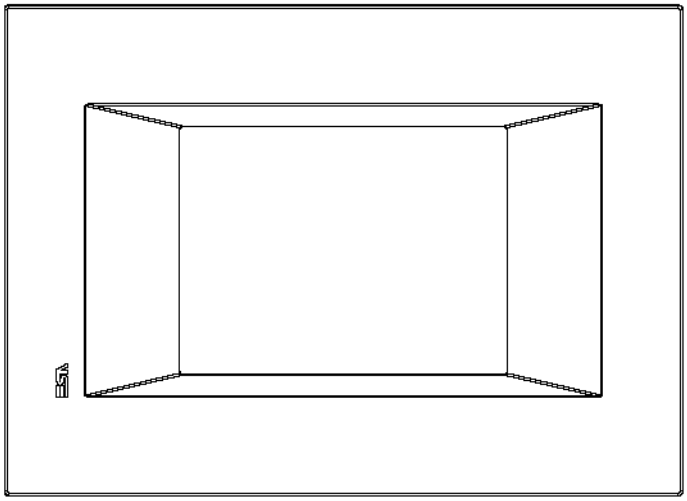
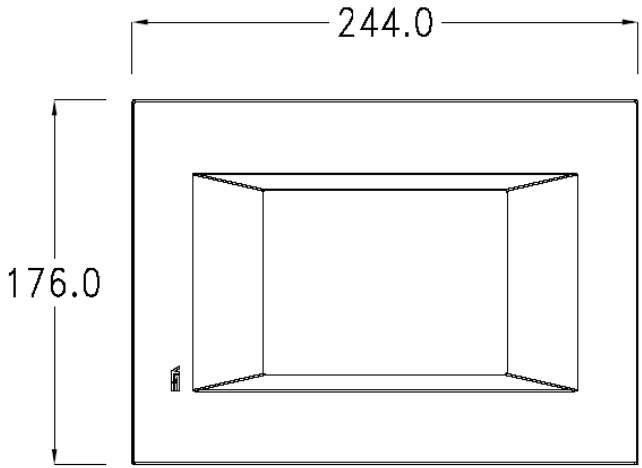
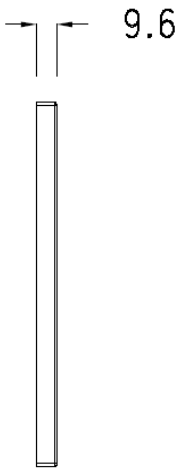


Plate dimensions

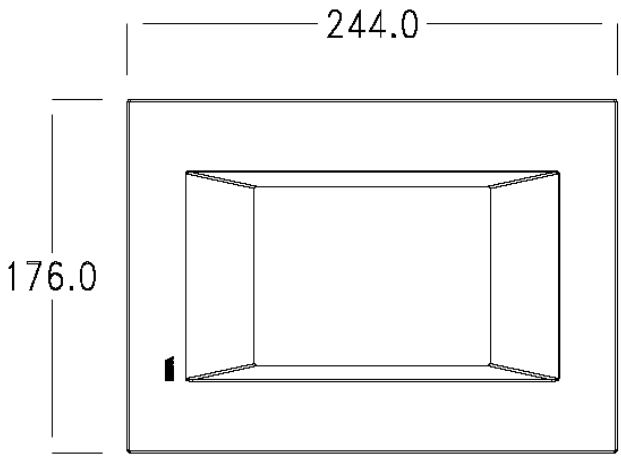
Front (Classic line plate)



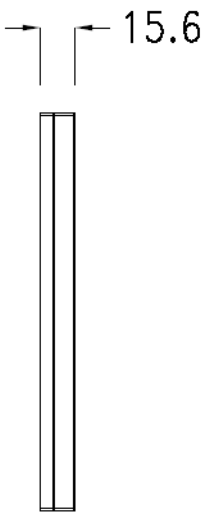
Side (Classic line plate)



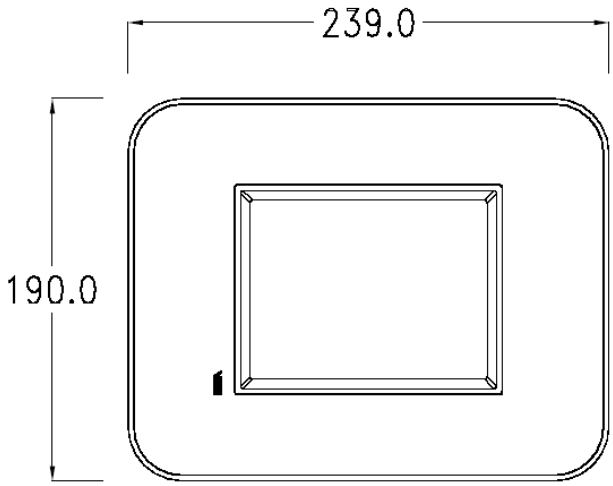
Front (Prime line plate)



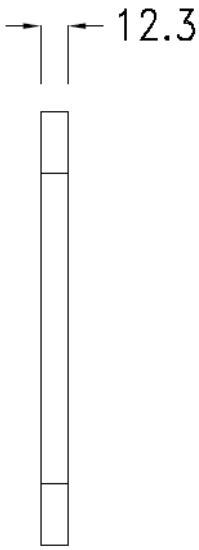
Side (Prime line plate)



Front (Vogue line plate)



Side (Vogue line plate)

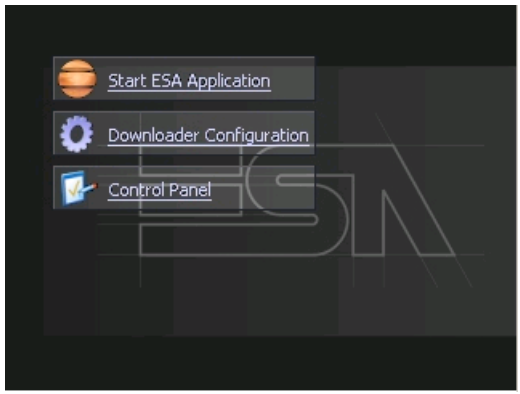


Order codes

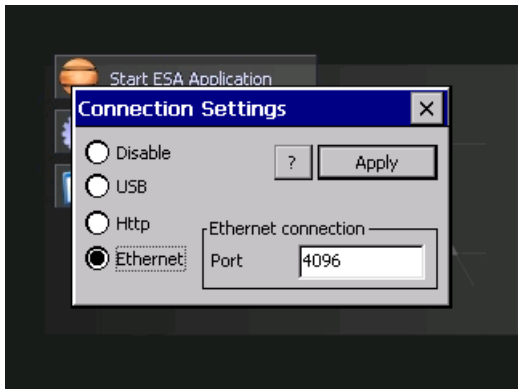
For the terminal described in this chapter, the codes of the purchasable plates are the following :

YC5LFXXXXXXX (Classic line)
YC5LSXXXXXXX (Prime line)
YC5TRXXXXXXX (Vogue line)

Service page



Service page to which access is gained by inserting a button in the project (exit runtime).
- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured
- Disable disables the connection with the terminal

- USB enables the USB connection with the terminal
- Http enables the ethernet connection with the terminal through an http protocol
- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

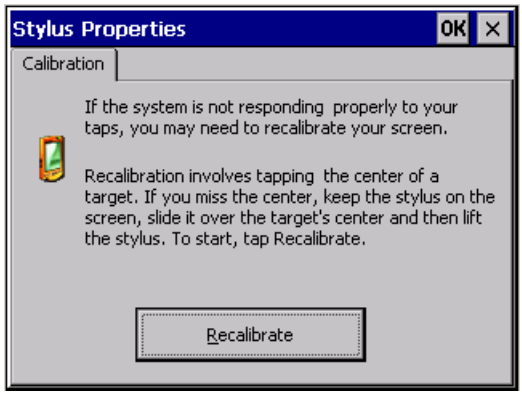
Control panel

By clicking on each of these icons access is gained to the terminal configuration.

Stylus

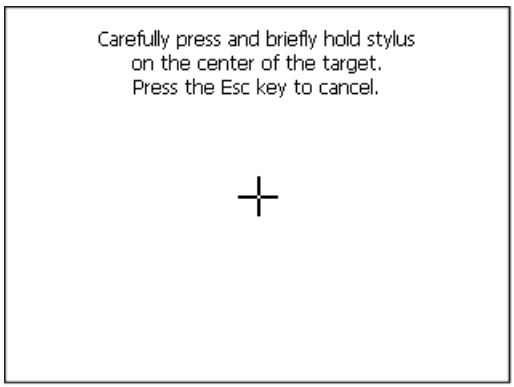
The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.
If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

The procedure requires great attention because the precision of the keys' area depends from the calibration.

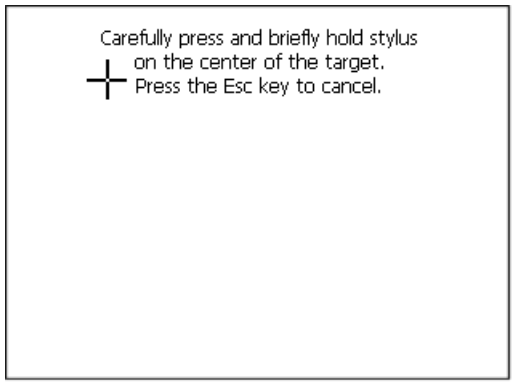


From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.

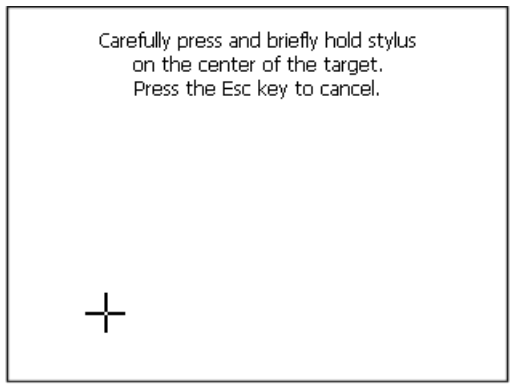
Step 1: touch the screen near the crosses



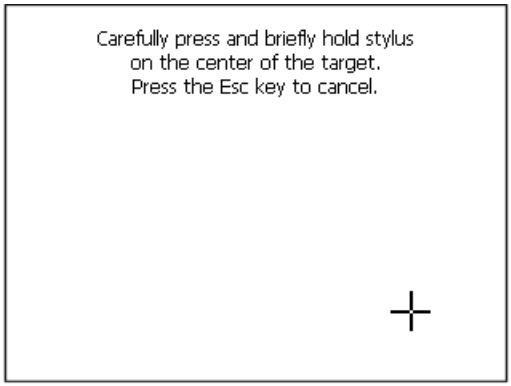
Step 2: touch the screen near the crosses



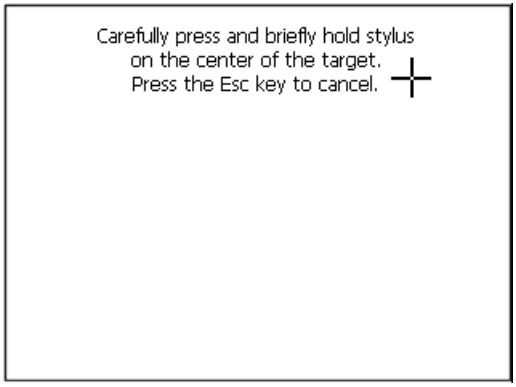
Step 3: touch the screen near the crosses



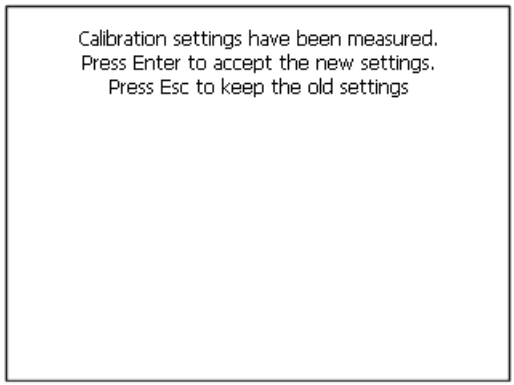
Step 4: touch the screen near the crosses



Step 5: touch the screen near the crosses



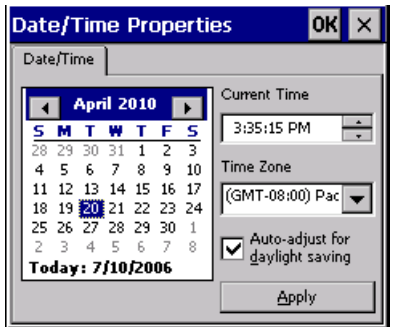
Step 6
Touch anywhere on the screen to end calibration.



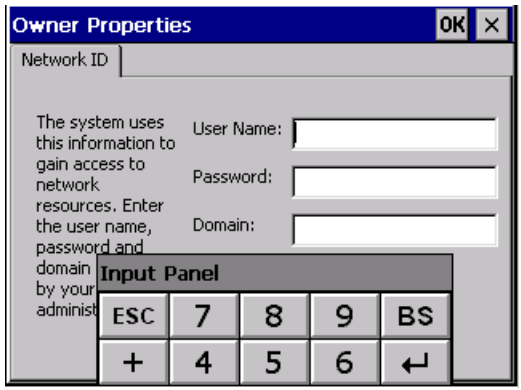
The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date/Time

From here it is possible to amend: date, time and time zone. By enabling the “automatically adjust clock for daylight saving” check, the time is automatically updated at BST or GMT.



Owner

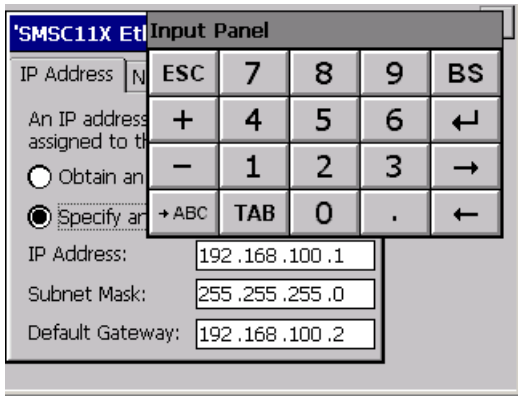


This information is used by Windows CE to access the network resources.
Username: enter the user name to access the network
Password: enter the password to access the network
Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

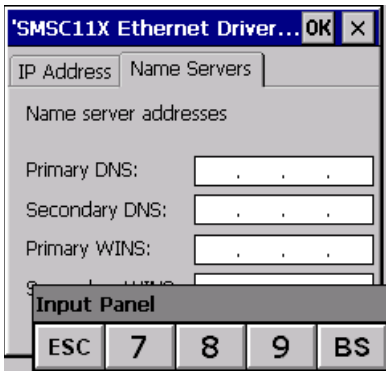
IP address



Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)
Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

Name servers



If necessary, the parameters relating to the relative DNS or AL WINS must be entered

In case the above data is unknown, contact the network administrator.

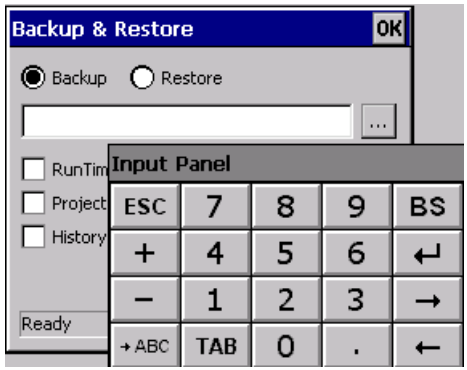
Lamp Saver

By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness

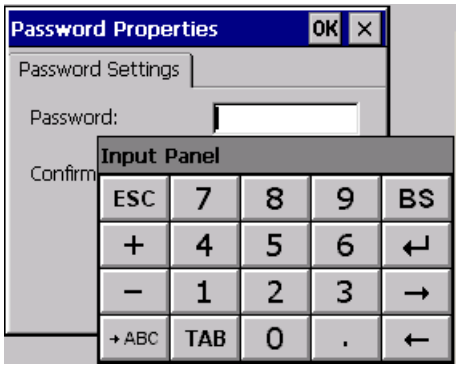
The Brightness allows regulating the brightness of the display lamp.

Backup



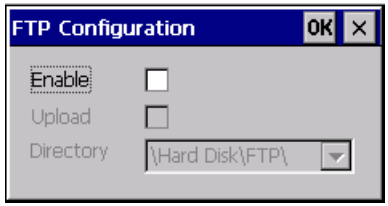
A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History.
It is essential to tick at least one of the components to be exported and choose a path where to save the file.
The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password



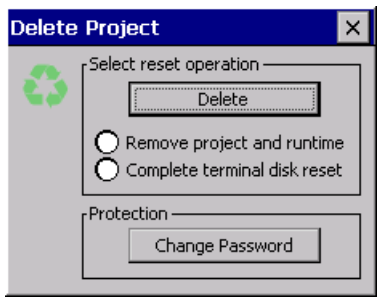
The Password option allows assigning a password to the terminal.
The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

FTP



The “FTP” acronym means “Files Transfer Protocol”. It gives the user the possibility to enable and disable the “FTP Server” service of the panel from any other device (PC,XS,IT,YT) connected to the network.
This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled :

Reset

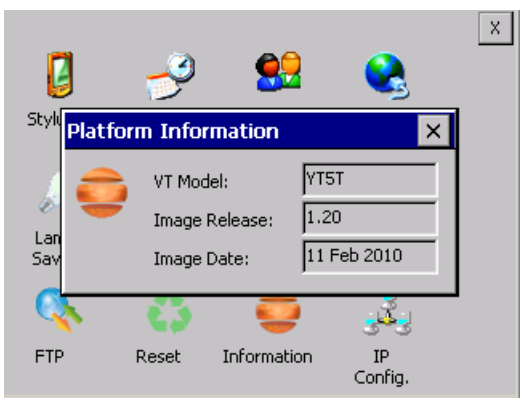


"Reset" is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk. Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled.
The user can choose from 2 options :

-"Remove project and runtime" -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.

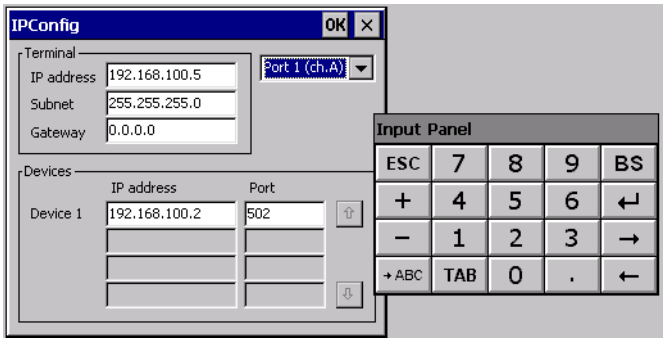
-"Complete terminal disk reset" -> choosing this option, the whole content of the "Hard Disk" folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information



Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config



By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.
The function “IP Config” is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).
By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.

8. YT7T Visualyser

Technical features

The table below lists the main technical features of the product in question.

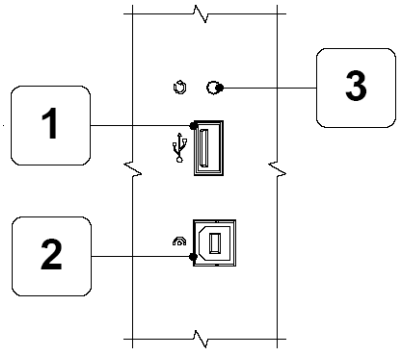
	YT7T
Display	
Type	Graphic LCD TFT
Colors/levels	65.536 colors
Size	7,5"
Touch screen	Analog
Resolution (landscape)	640 x 480
Brightness	350 cd/m²
Backlight	CCFL
System	
Runtime	Polymath EZbuilder / MyVision
RAM	64 MB
Flash memory	32 MB
CPU type	Intel PXA270
CPU clock	520MHz
Interfaces	
First integrated port	RS-485
Second integrated port	KNX (optional)
USB Host port	USB Host 1.1 (frontal)
USB Device port	USB Device 1.1 (frontal)
Slot CardBus	SD/MMC
Network	Ethernet 10/100 Mbit
Dimensions	
External (mm) (W x H x D)	290 x 196 x 65
Technical data	
Power supply	18...32 Vcc
Consumption (24 Vcc)	~ 10 W
Protection level (with cover)	IP 40 (frontal)
Operating temperature	0...+50 °C
Storage temperature	-20...+65°C
Humidity (non condensing)	85%
Certifications	CE, cULus
Wall box	
Dimensions (mm) (W x H x D)	267 x 205 x 72

Product codes

The purchase codes with possible configurations of the product are given in the following table :

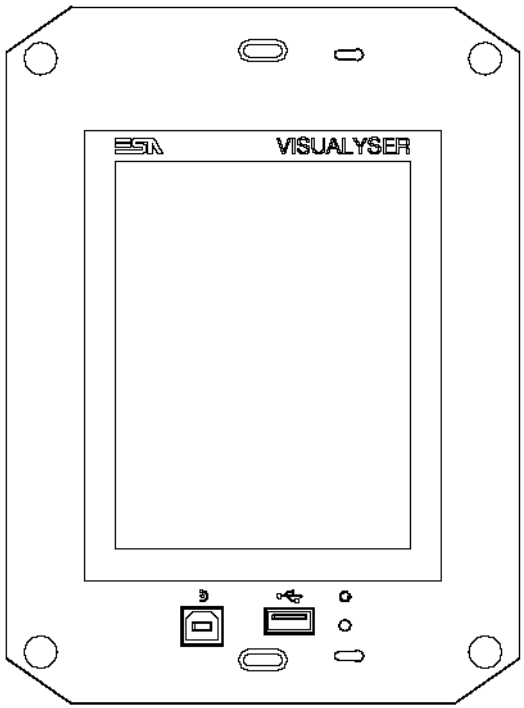
Product codes	
VISUALYSER (standard configuration)	**YT7T1010**
VISUALYSER with Konnex port	**YT7T1210**
Wall box	YB700

Front

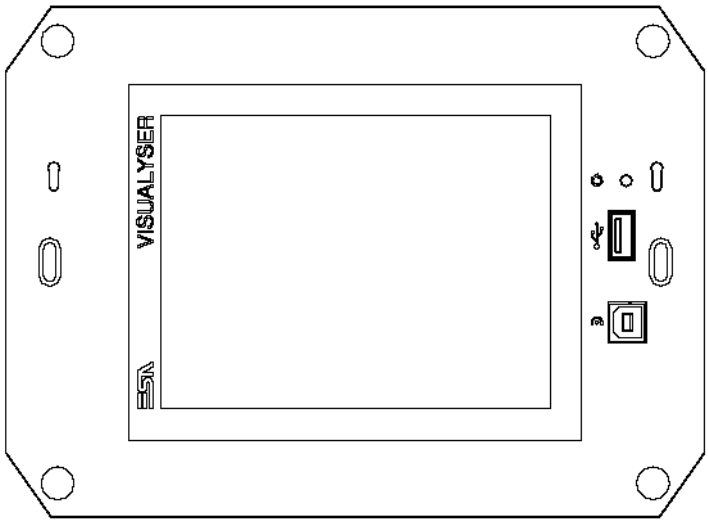


1	Porta seriale USB USB port Port USB USB-Schnittstelle Puerto USB	3	Pulsante di reset Reset button Bouton de reset Reset-Taste Tecla de reset
2	Porta seriale per il trasferimento del progetto Serial port to transfer the project Port sériel pour le transfert du projet Serielle Schnittstelle für die Projektübertragung Puerto serie para la trasferencia del proyecto		

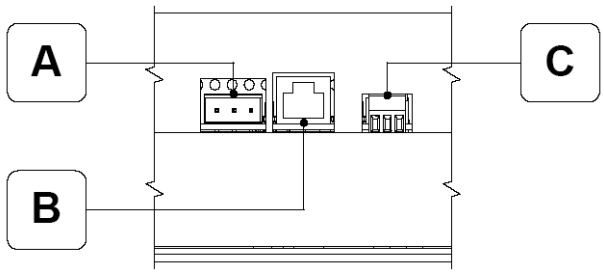
Vertical assembly

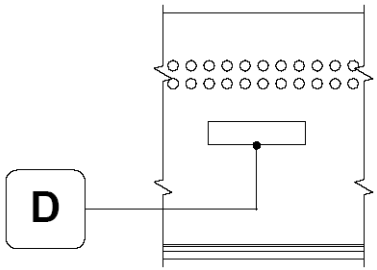


Horizontal assembly



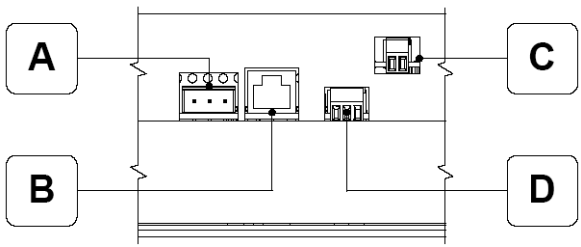
Rear

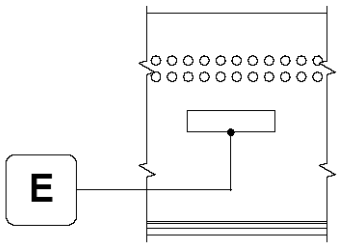




A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	C	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos
B	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45	D	**SD/MMC (Push-Push System)** Premere per inserire / Premere per estrarre Push-in / Push-out Pousser pour insérer / Pousser pour extraire Drücken - Karte einfügen / Drücken - Karte entnehmen Se inserta apretando / Se extrae apretando

Products rear with KNX board (Konnex)

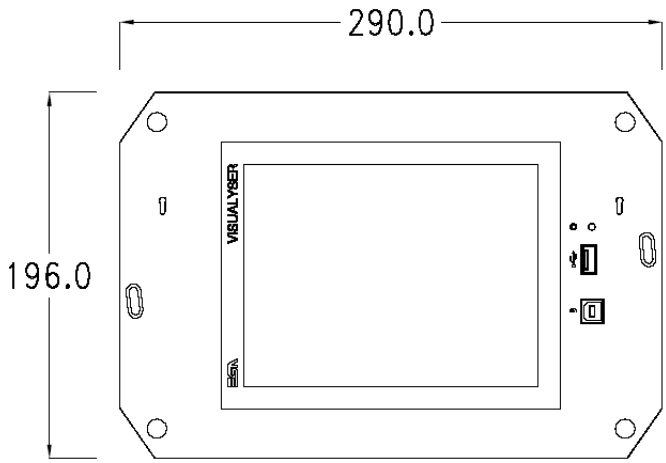




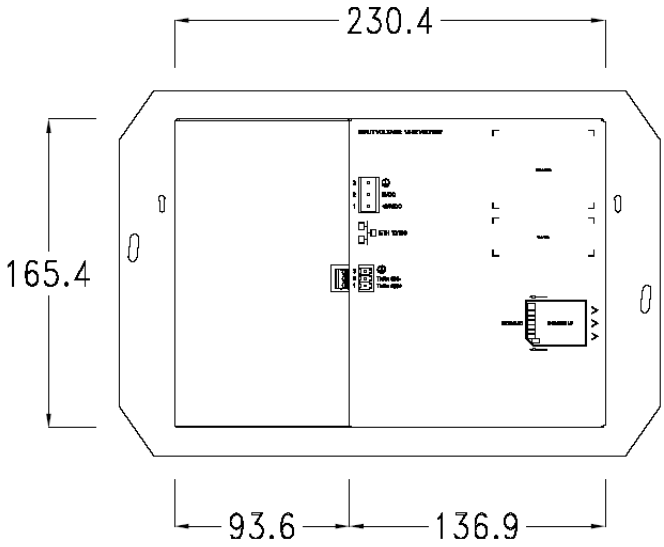
A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	D	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos
B	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45	E	**SD/MMC (Push-Push System)** Premere per inserire / Premere per estrarre Push-in / Push-out Pousser pour insérer / Pousser pour extraire Drücken - Karte einfügen / Drücken - Karte entnehmen Se inserta apretando / Se extrae apretando
C	**KNX** (opzionale / optional / option / option / opción) Porta seriale KONNEX. KONNEX serial port. Port sériel KONNEX. KONNEX - Schnittstelle. Puerto serie KONNEX.		

Drilling template

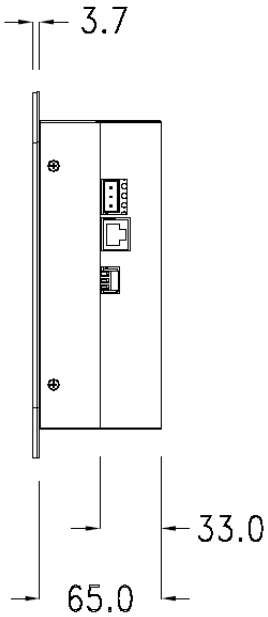
Front



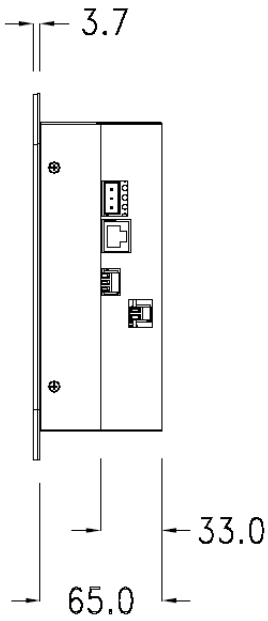
Rear



Side

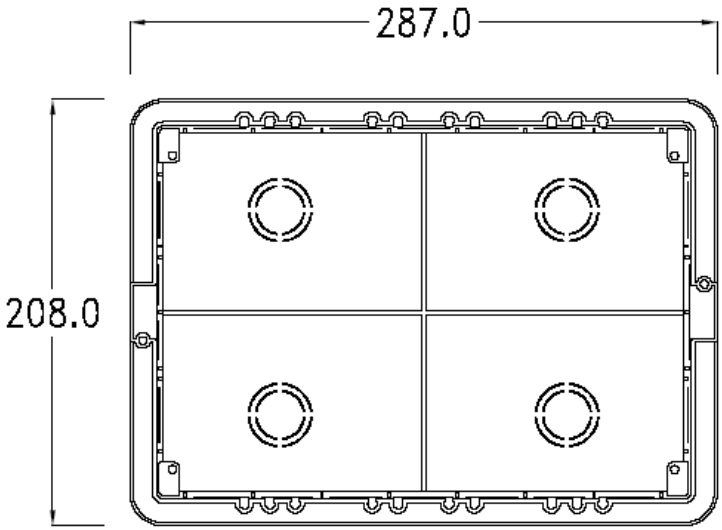


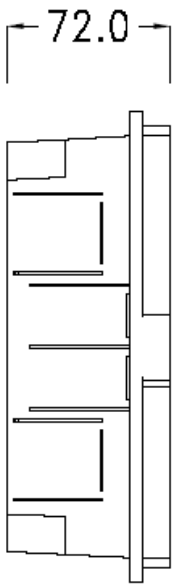
Products side with KNX board (Konnex)



Wall box

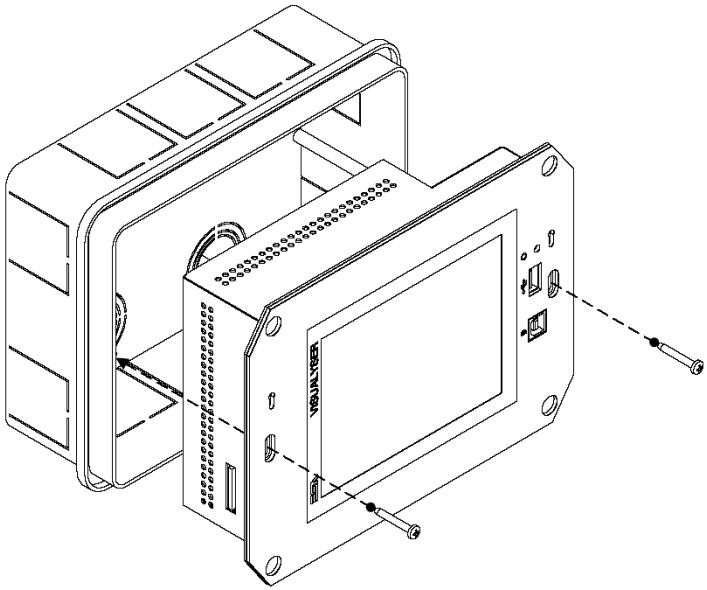
ESA supplies the wall box (order code: YB700) for fixing the terminal :





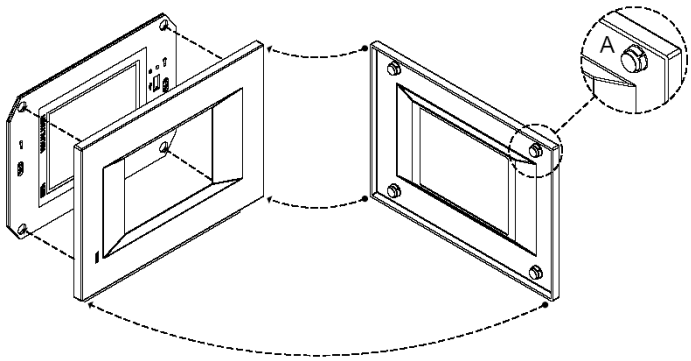
Panel mounting

After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.
For fixing use appropriate screws contained in the terminal packing kit :



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :



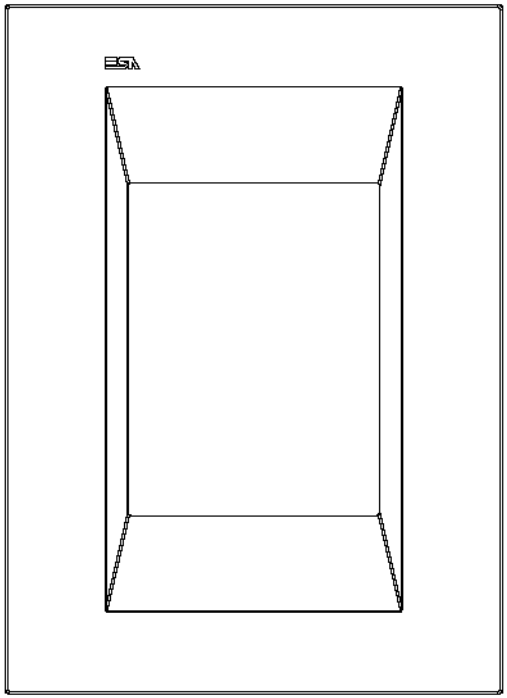
The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Prime", "Vogue" and "Bold" lines plates, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

Plate Assembly

Vertical assembly



Horizontal assembly

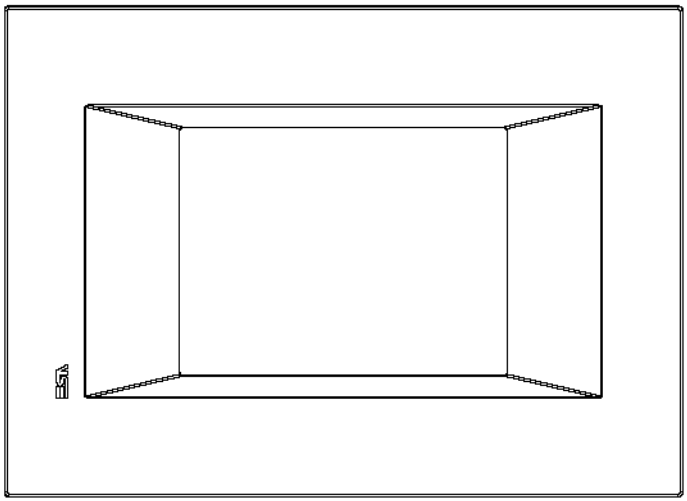
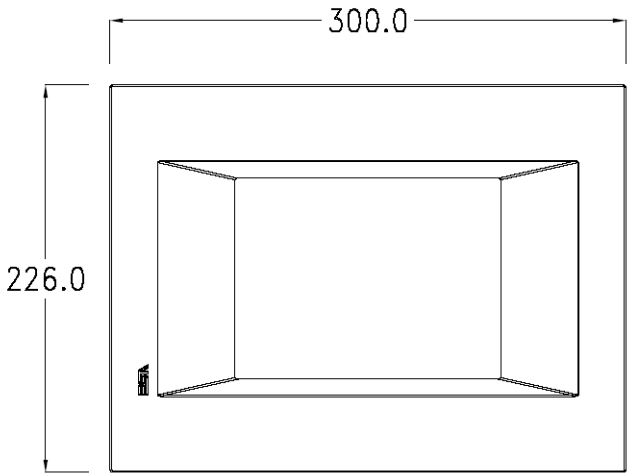
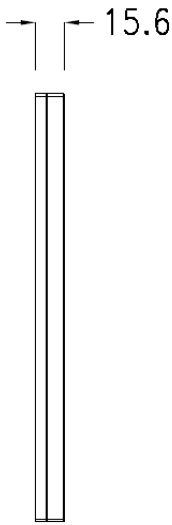


Plate dimensions

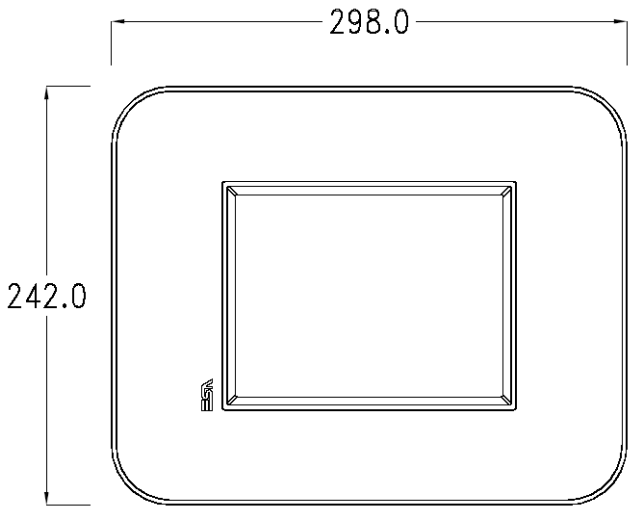
Front (Prime line plate)



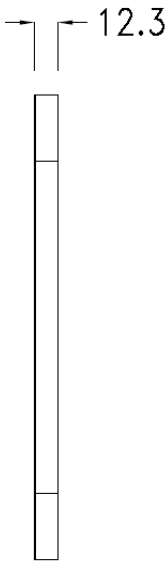
Side (Prime line plate)



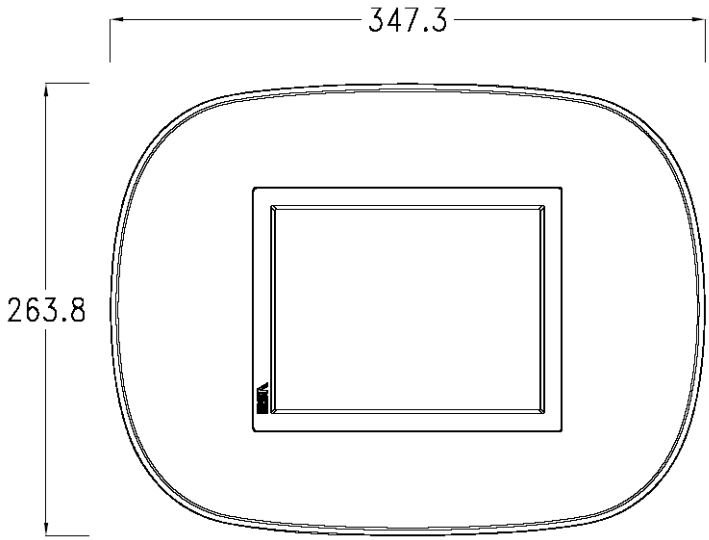
Front (Vogue line plate)



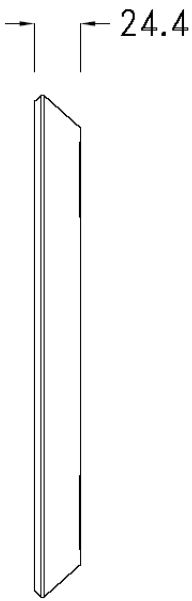
Side (Vogue line plate)



Front (Bold line plate)



Side (Bold line plate)



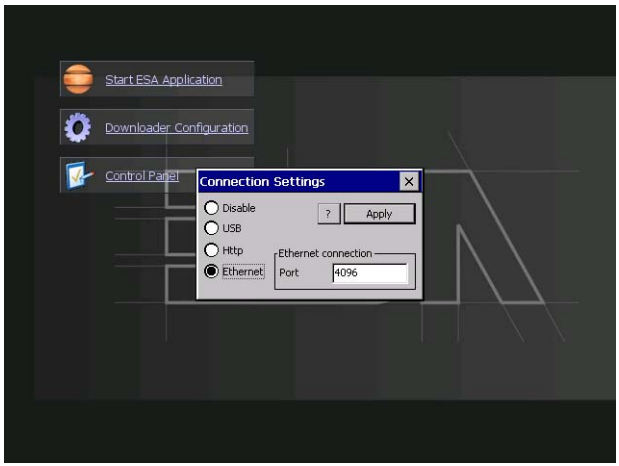
Codici ordinazione

For the terminal described in this chapter, the codes of the purchasable plates are the following:

YC7LSXXXXXXX (Prime line)
YC7MNXXXXXXX (Bold line)
YC7TRXXXXXXX (Vogue line)

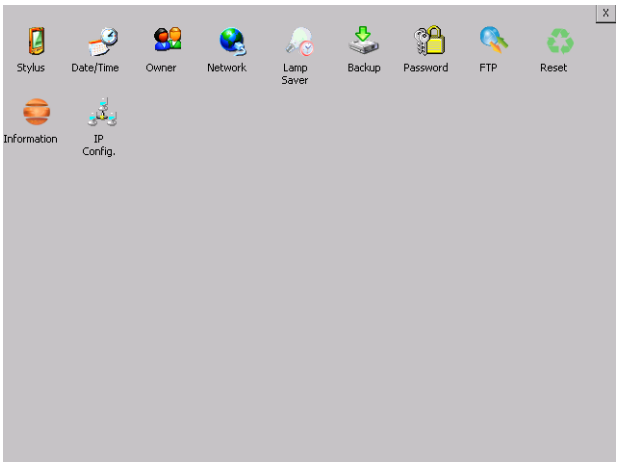
Pagina di servizio

Service page to which access is gained by inserting a button in the project (exit runtime).
- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured
- Disable disables the connection with the terminal
- USB enables the USB connection with the terminal
- Http enables the ethernet connection with the terminal through an http protocol
- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

Control panel

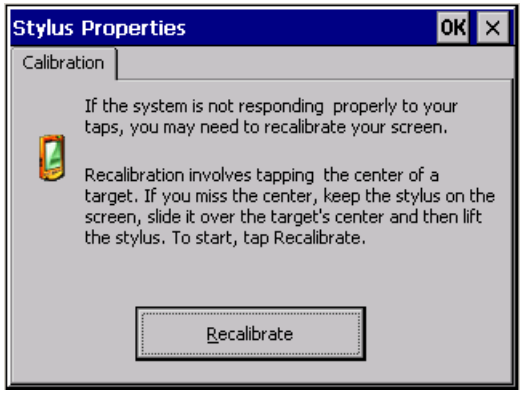


By clicking on each of these icons access is gained to the terminal configuration.

Stylus

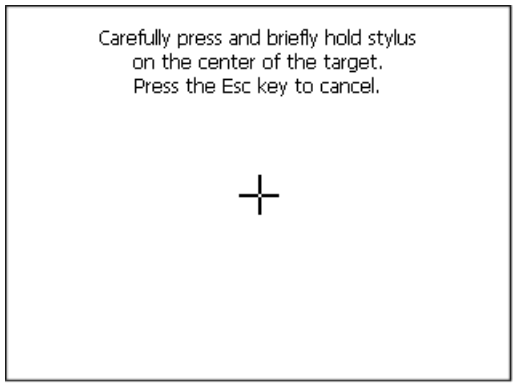
The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.
If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

The procedure requires great attention because the precision of the keys' area depends from the calibration.

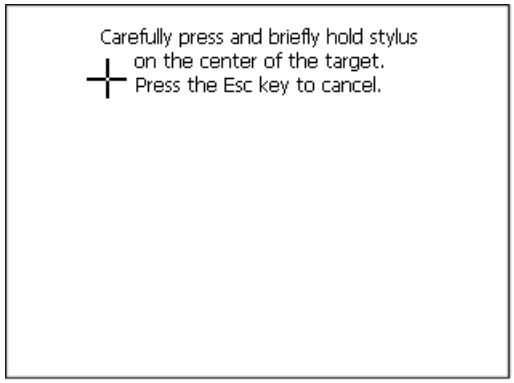


From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.

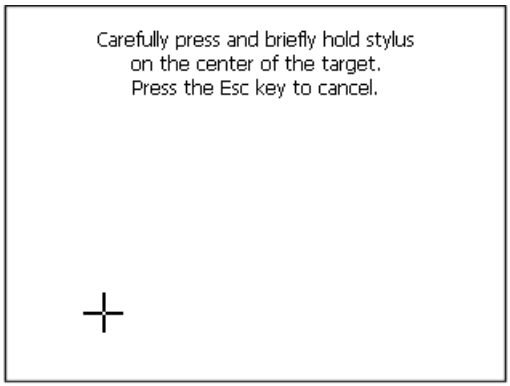
Step 1: touch the screen near the crosses



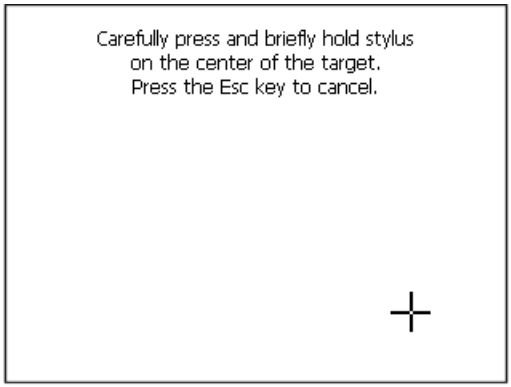
Step 2: touch the screen near the crosses



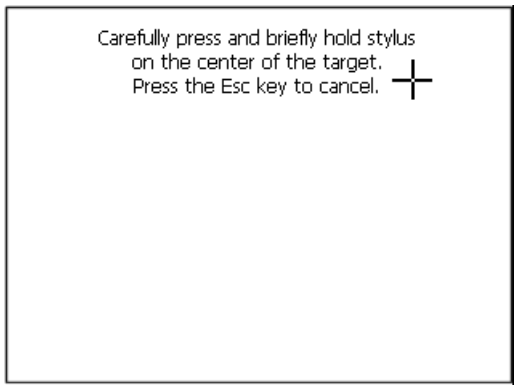
Step 3: touch the screen near the crosses



Step 4: touch the screen near the crosses



Step 5: touch the screen near the crosses

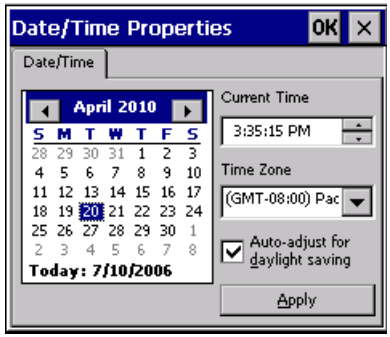


Step 6
Touch anywhere on the screen to end calibration.

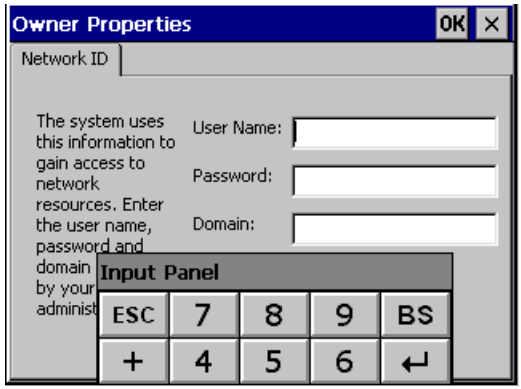
The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date / Time

From here it is possible to amend: date, time and time zone. By enabling the “automatically adjust clock for daylight saving” check, the time is automatically updated at BST or GMT.



Owner

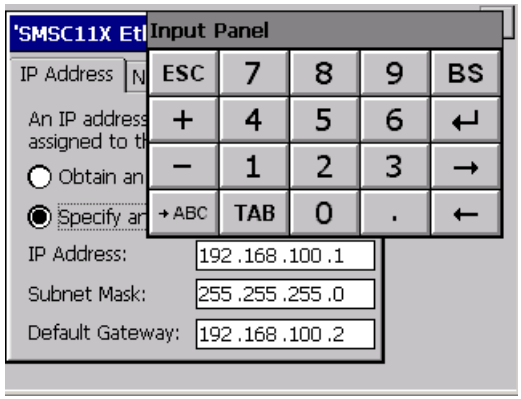


This information is used by Windows CE to access the network resources.
Username: enter the user name to access the network
Password: enter the password to access the network
Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

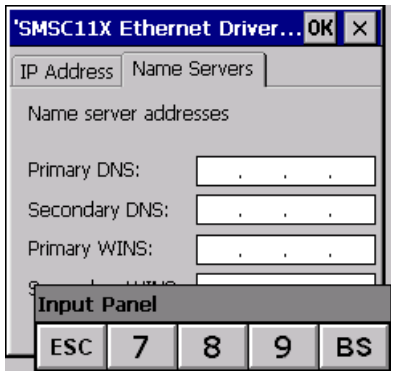
IP address



Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)
Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

Name servers



If necessary, the parameters relating to the relative DNS or AL WINS must be entered

In case the above data is unknown, contact the network administrator.

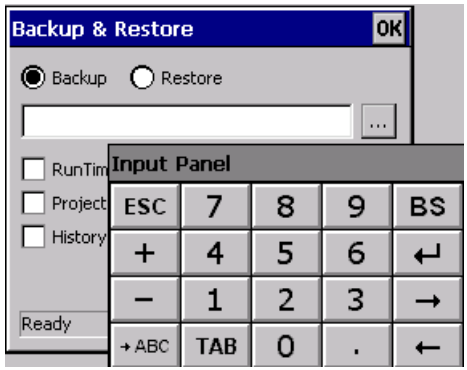
Lamp Saver

By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness

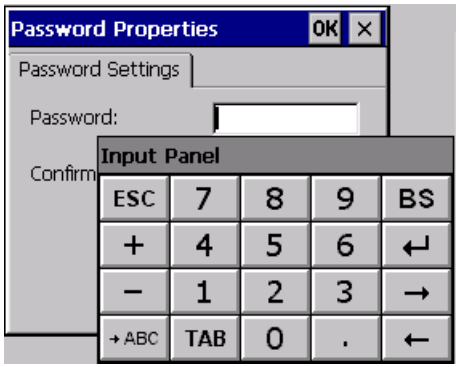
The Brightness allows regulating the brightness of the display lamp.

Backup



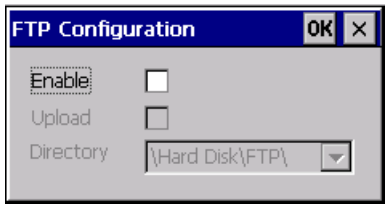
A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History.
It is essential to tick at least one of the components to be exported and choose a path where to save the file.
The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password



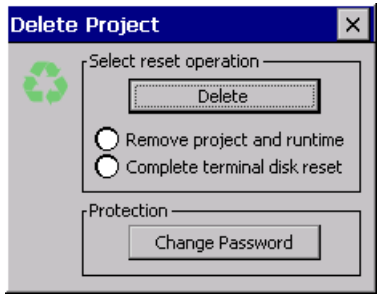
The Password option allows assigning a password to the terminal.
The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

FTP



The “FTP” acronym means “Files Transfer Protocol”. It gives the user the possibility to enable and disable the “FTP Server” service of the panel from any other device (PC,XS,IT,YT) connected to the network.
This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled :

Reset

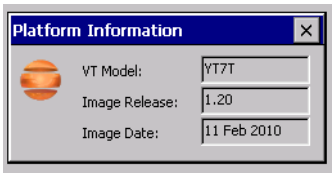


“Reset” is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled.
The user can choose from 2 options :

-“Remove project and runtime” -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.

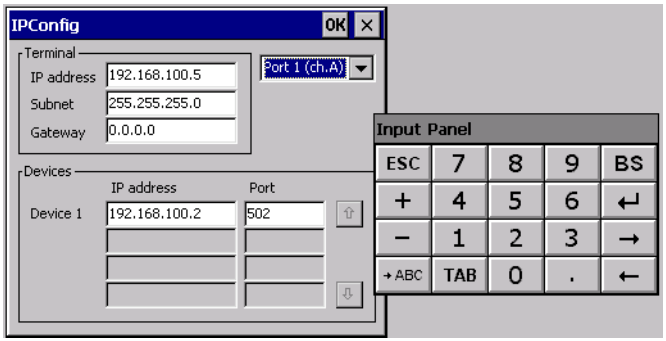
-“Complete terminal disk reset” -> choosing this option, the whole content of the “Hard Disk” folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information



Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config



By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.
The function “IP Config” is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).
By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.

9. YTAT Visualyser

Technical features

The table below lists the main technical features of the product in question.

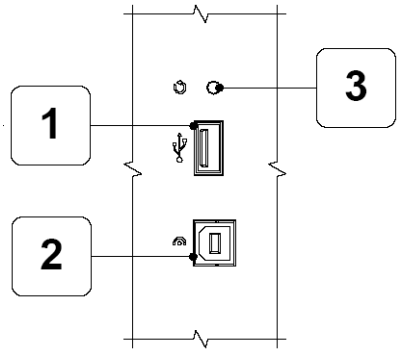
	YTAT
Display	
Type	Graphic LCD TFT
Colors/levels	65.536 colors
Size	10,4"
Touch screen	Analog
Resolution (landscape)	640 x 480
Brightness	380 cd/m²
Backlight	CCFL
System	
Runtime	Polymath EZbuilder / MyVision
RAM	64 MB
Flash memory	32 MB
CPU type	Intel PXA270
CPU clock	520MHz
Interfaces	
First integrated port	RS-485
Second integrated port	KNX (optional)
USB Host port	USB Host 1.1 (frontal)
USB Device port	USB Device 1.1 (frontal)
Slot CardBus	SD/MMC
Network	Ethernet 10/100 Mbit
Dimensions	
External (mm) (W x H x D)	314 x 294 x 64
Technical data	
Power supply	18...32 Vcc
Consumption (24 Vcc)	~ 13 W
Protection level (with cover)	IP 40 (frontal)
Operating temperature	0...+50 °C
Storage temperature	-20...+65°C
Humidity (non condensing)	85%
Certifications	CE, cULus
Wall box	
Dimensions (mm) (W x H x D)	318 x 288 x 73

Product codes

The purchase codes with possible configurations of the product are given in the following table :

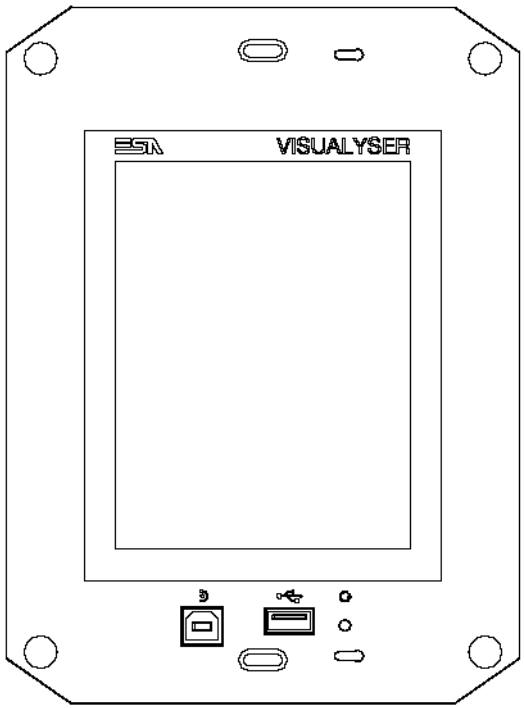
Product codes	
VISUALYSER (standard configuration)	**YTAT1010**
VISUALYSER with Konnex port	**YTAT1210**
Wall box	YBA00

Front

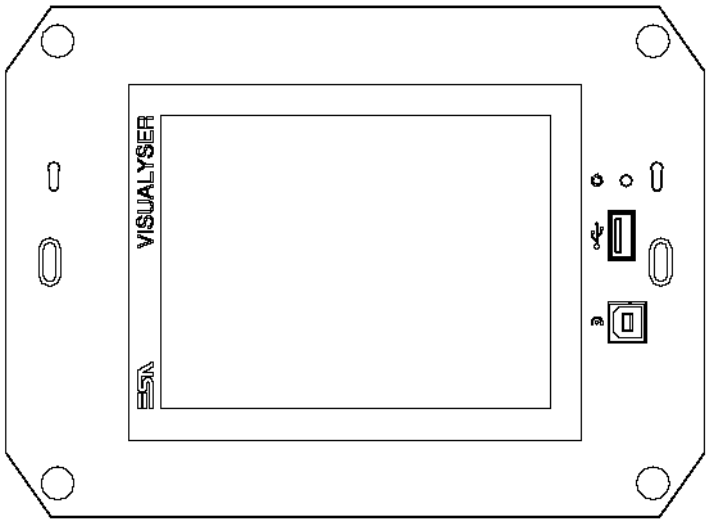


1	Porta seriale USB USB port Port USB USB-Schnittstelle Puerto USB	3	Pulsante di reset Reset button Bouton de reset Reset-Taste Tecla de reset
2	Porta seriale per il trasferimento del progetto Serial port to transfer the project Port sériel pour le transfert du projet Serielle Schnittstelle für die Projektübertragung Puerto serie para la trasferencia del proyecto		

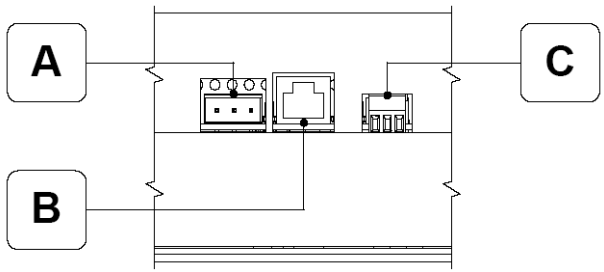
Vertical assembly

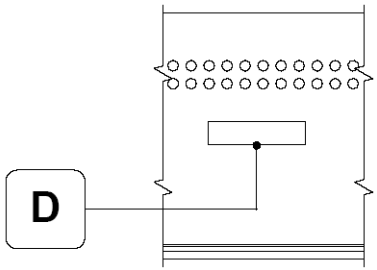


Horizontal assembly



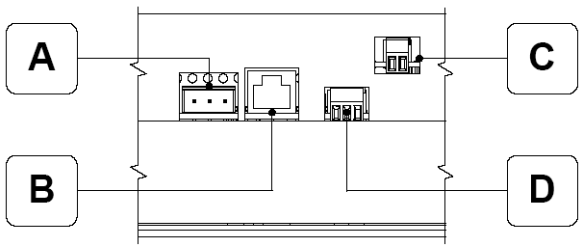
Rear

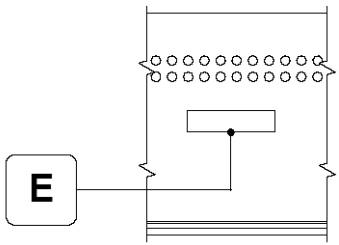




A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	C	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos
B	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45	D	**SD/MMC (Push-Push System)** Premere per inserire / Premere per estrarre Push-In / Push-out Pousser pour insérer / Pousser pour extraire Drücken - Karte einfügen / Drücken - Karte entnehmen Se inserta apretando / Se extrae apretando

Products rear with KNX board (Konnex)

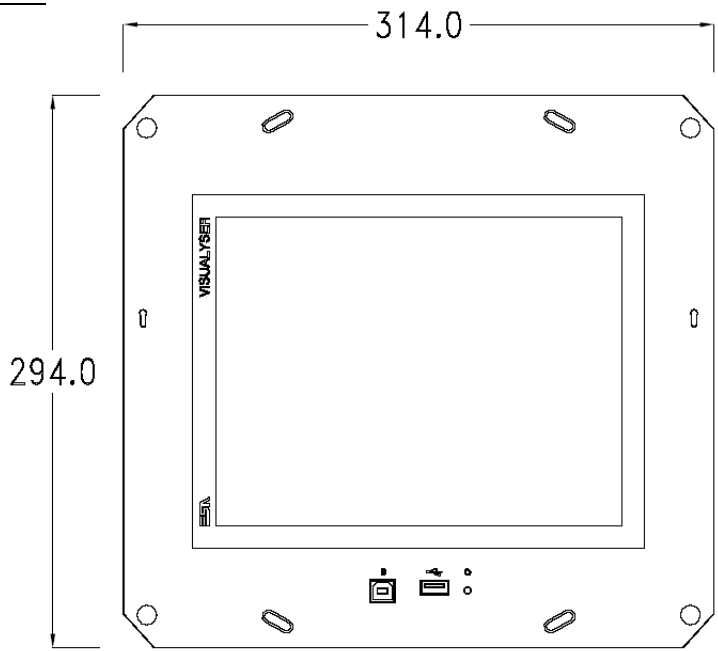




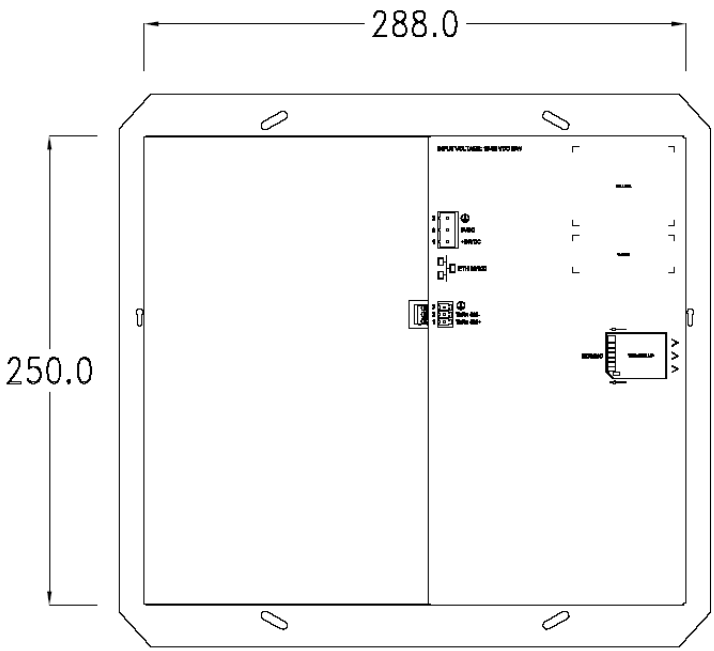
A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	D	**RS485** Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schnittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos
B	**ETH 10/100** Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45	E	**SD/MMC (Push-Push System)** Premere per inserire / Premere per estrarre Push-in / Push-out Pousser pour insérer / Pousser pour extraire Drücken - Karte einfügen / Drücken - Karte entnehmen Se inserta apretando / Se extrae apretando
C	**KNX** (opzionale / optional / option / option / opción) Porta seriale KONNEX. KONNEX serial port. Port sériel KONNEX. KONNEX - Schnittstelle. Puerto serie KONNEX.		

Drilling template

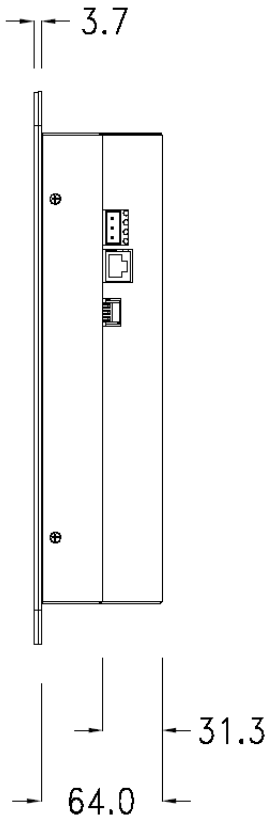
Front



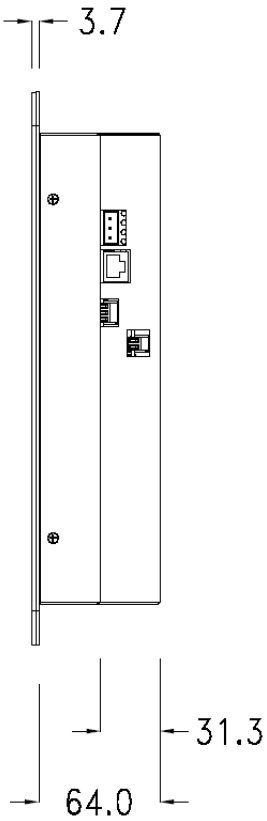
Rear



Side

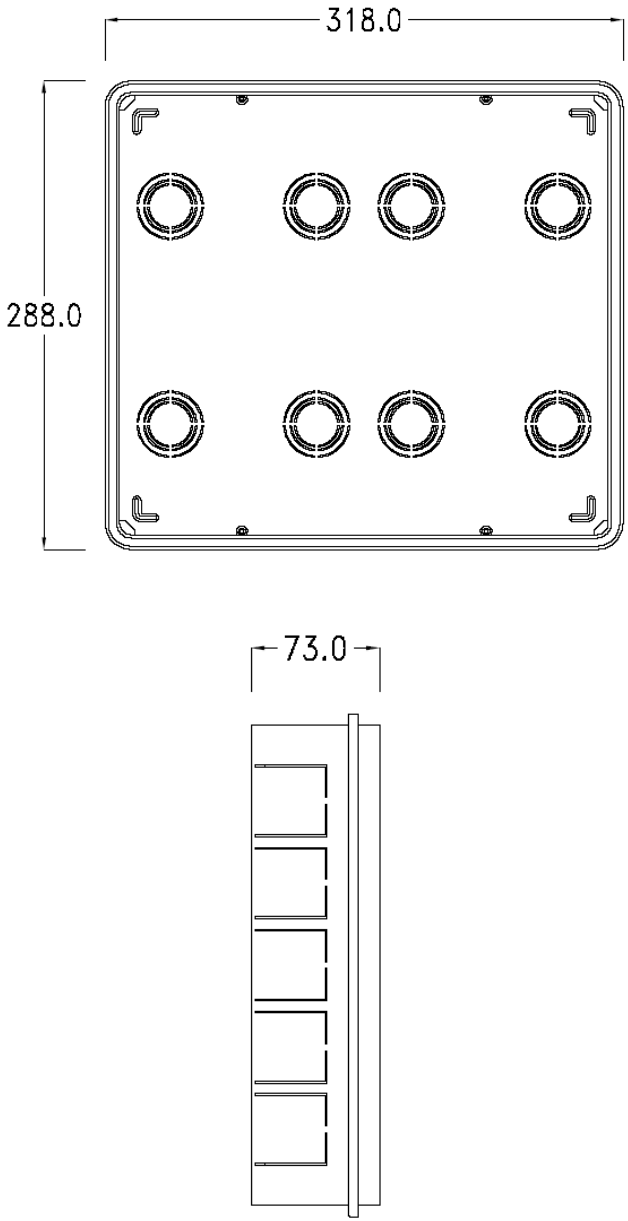


Products side with KNX board (Konnex)



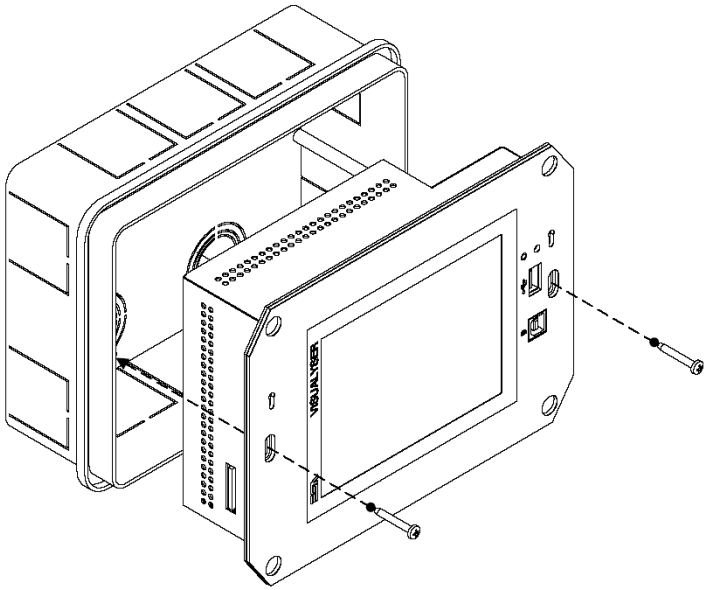
Wall box

ESA supplies the wall box (order code: YBA00) for fixing the terminal :



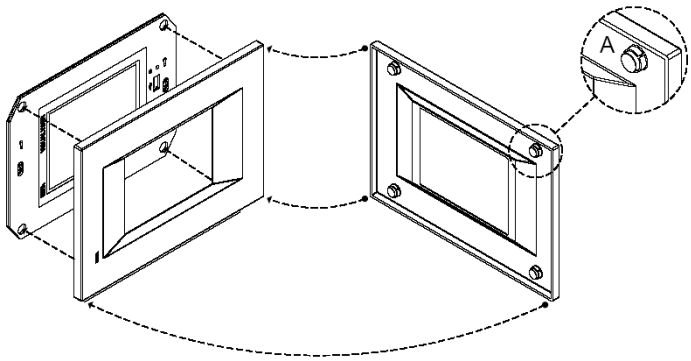
Panel mounting

After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.
For fixing use appropriate screws contained in the terminal packing kit :



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :



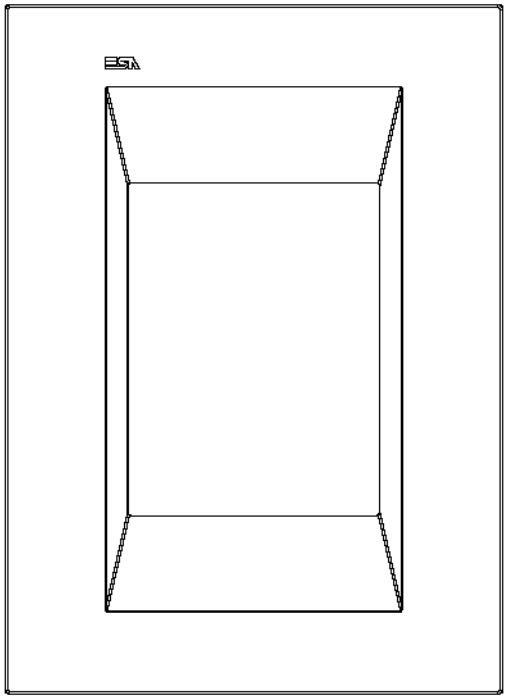
The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Prime", "Vogue" and "Bold" lines plates, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

Plate Assembly

Vertical assembly



Horizontal assembly

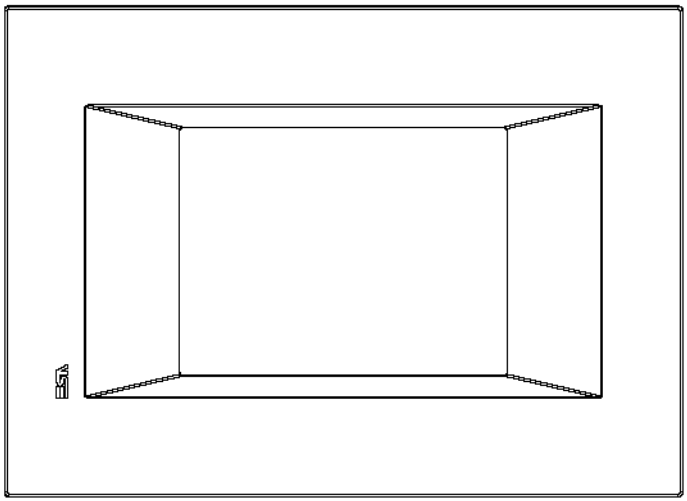
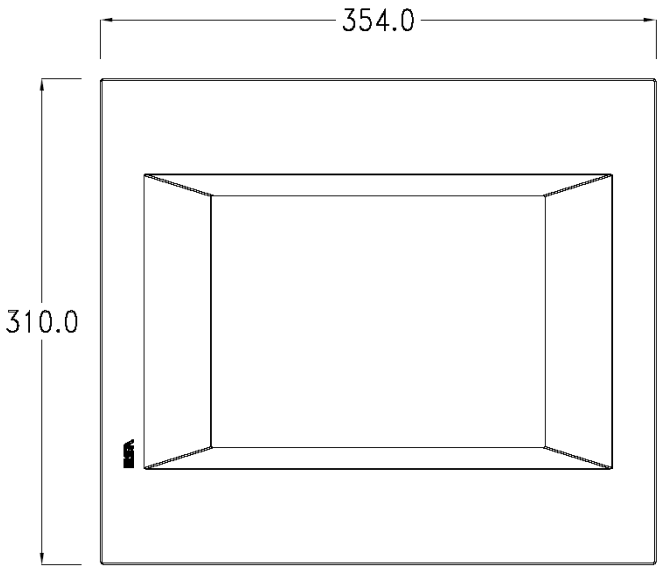
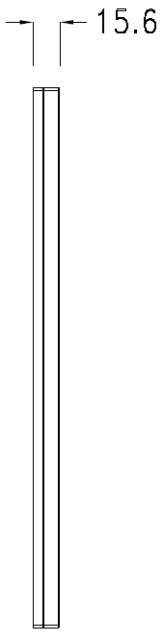


Plate dimensions

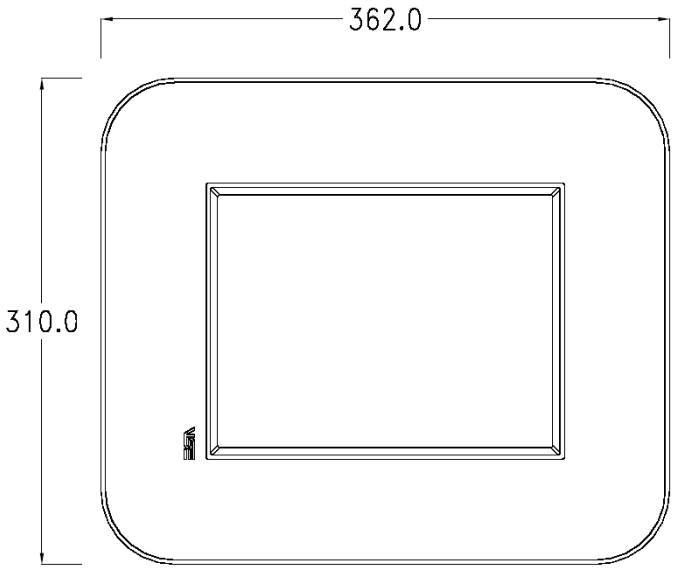
Front (Prime line plate)



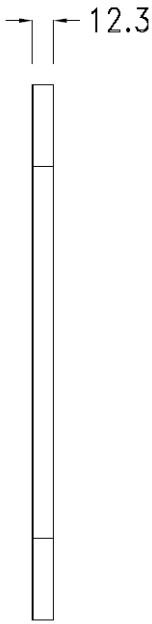
Side (Prime line plate)



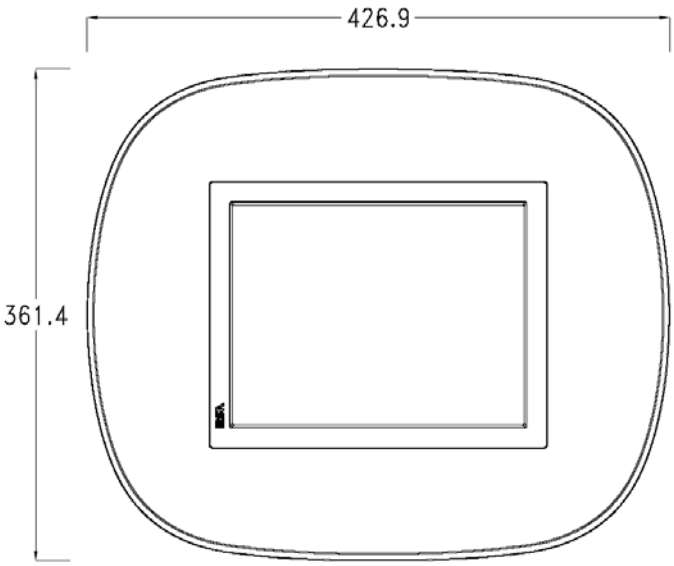
Front (Vogue line plate)



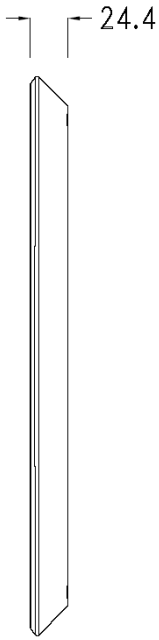
Side (Vogue line plate)



Front (Bold line plate)



Side (Bold line plate)



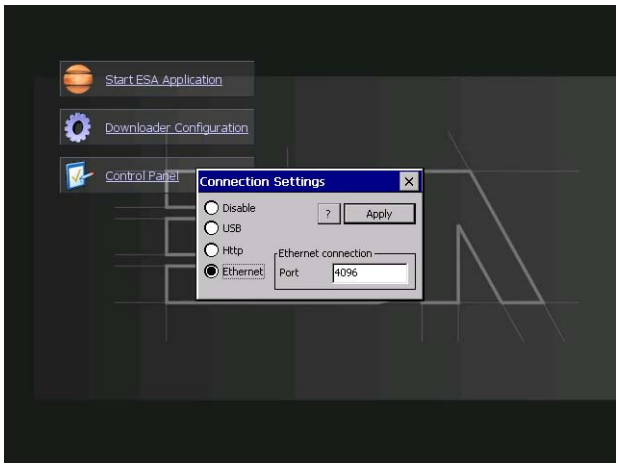
Codici ordinazione

For the terminal described in this chapter, the codes of the purchasable plates are the following:

YC7LSXXXXXXX (Prime line)
YC7MNXXXXXXX (Bold line)
YC7TRXXXXXXX (Vogue line)

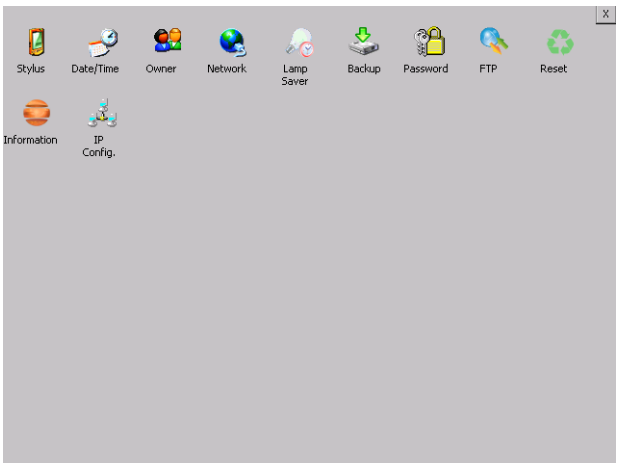
Pagina di servizio

Service page to which access is gained by inserting a button in the project (exit runtime).
- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured
- Disable disables the connection with the terminal
- USB enables the USB connection with the terminal
- Http enables the ethernet connection with the terminal through an http protocol
- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

Control panel

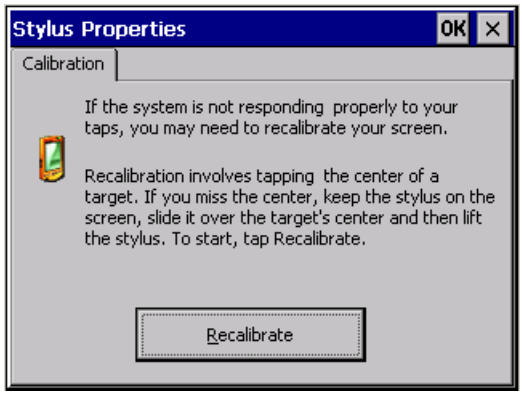


By clicking on each of these icons access is gained to the terminal configuration.

Stylus

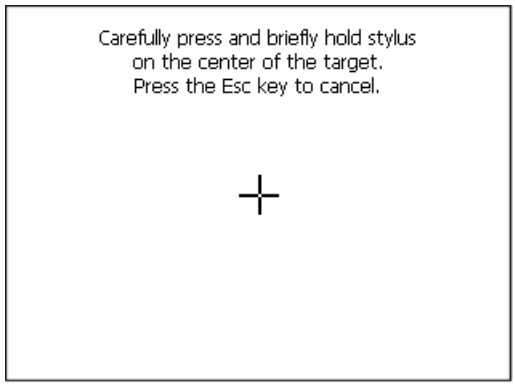
The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.
If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

The procedure requires great attention because the precision of the keys' area depends from the calibration.

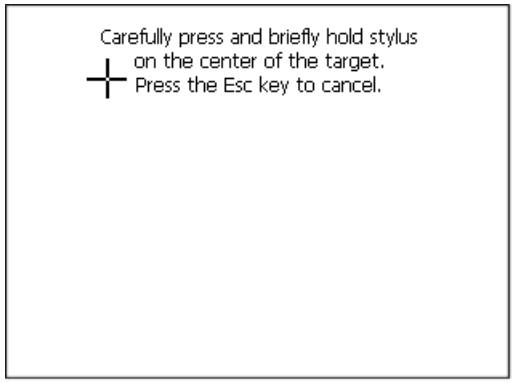


From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.

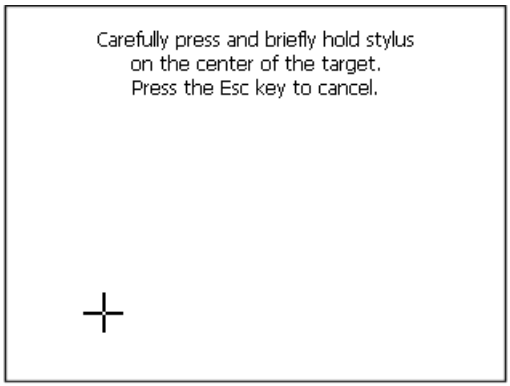
Step 1: touch the screen near the crosses



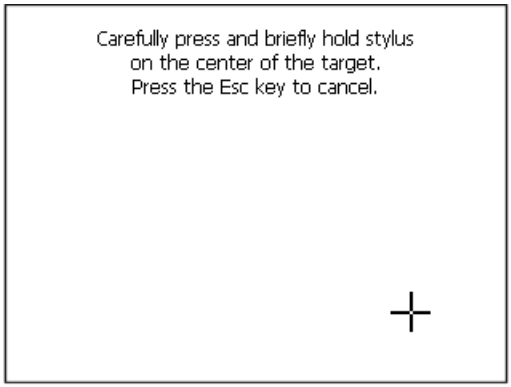
Step 2: touch the screen near the crosses



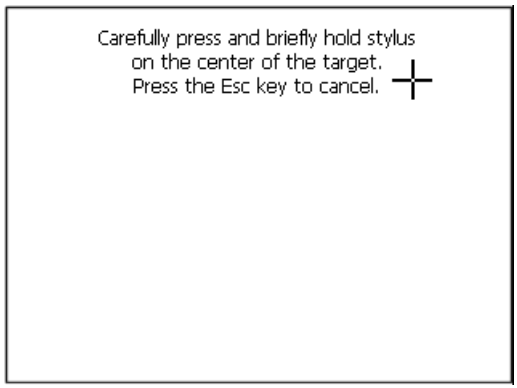
Step 3: touch the screen near the crosses



Step 4: touch the screen near the crosses



Step 5: touch the screen near the crosses

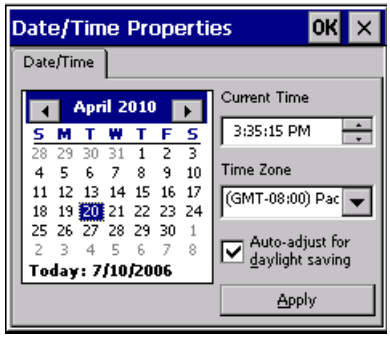


Step 6
Touch anywhere on the screen to end calibration.

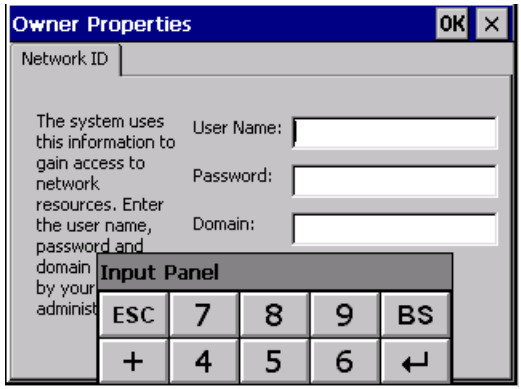
The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date / Time

From here it is possible to amend: date, time and time zone. By enabling the “automatically adjust clock for daylight saving” check, the time is automatically updated at BST or GMT.



Owner

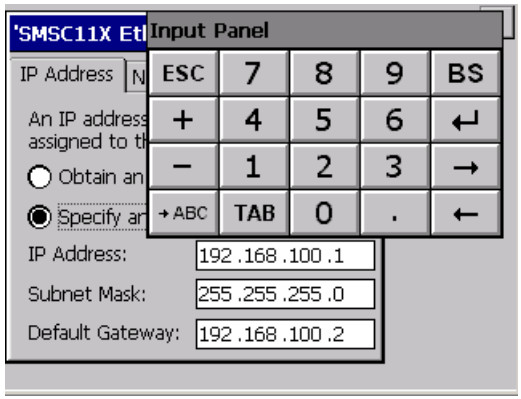


This information is used by Windows CE to access the network resources.
Username: enter the user name to access the network
Password: enter the password to access the network
Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

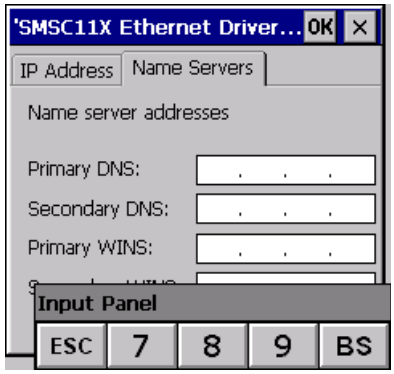
IP address



Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)
Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

Name servers



If necessary, the parameters relating to the relative DNS or AL WINS must be entered

In case the above data is unknown, contact the network administrator.

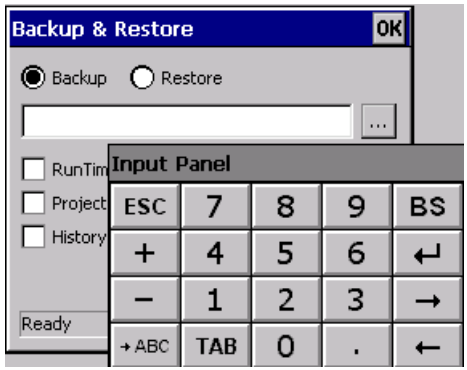
Lamp Saver

By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness

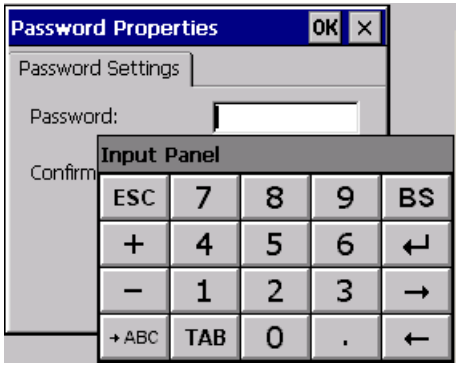
The Brightness allows regulating the brightness of the display lamp.

Backup



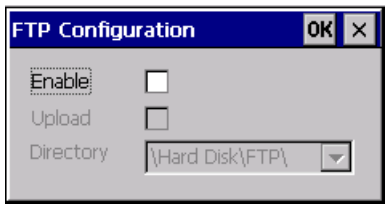
A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History.
It is essential to tick at least one of the components to be exported and choose a path where to save the file.
The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password



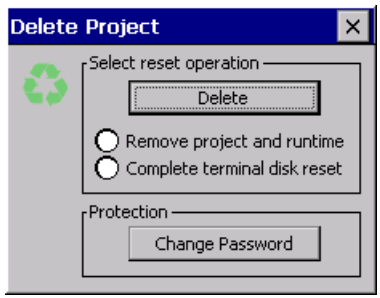
The Password option allows assigning a password to the terminal.
The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

FTP



The “FTP” acronym means “Files Transfer Protocol”. It gives the user the possibility to enable and disable the “FTP Server” service of the panel from any other device (PC,XS,IT,YT) connected to the network.
This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled :

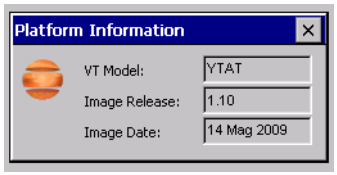
Reset



“Reset” is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk.
Selecting the “Enable” option, the “FTP” folder sharing service in the “Hard Disk” directory is enabled.
The user can choose from 2 options :

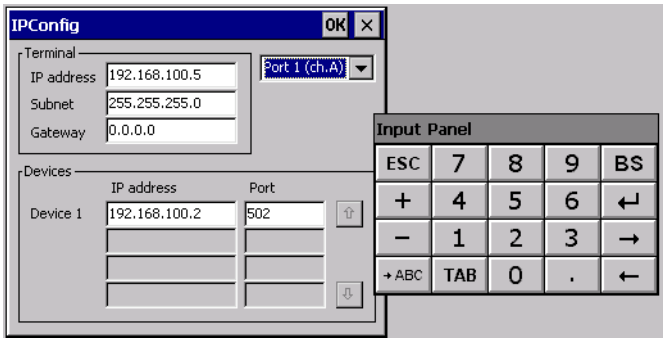
-“Remove project and runtime” -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.
-“Complete terminal disk reset” -> choosing this option, the whole content of the “Hard Disk” folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information



Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config



By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.
The function “IP Config” is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).
By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.

10. YXDT Visualyser

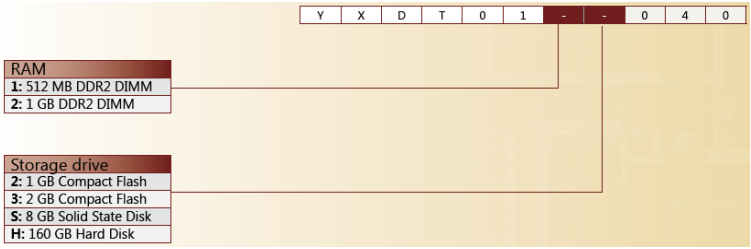
Technical features

The table below lists the main technical features of the product in question.

	YXD
Display	
Dimension	15"
Technology	TFT
Colors	262.000
Touch screen	Analogic (5 wires)
Backlight	CCFL (2 lamps)
Lamp life (min hours at 25°C)	50.000
Resolution	1024 x 768
Brightness	350 cd/m²
Contrast	700:1
Vision angle	140 horizzontal / 125 vertical
Processor	
CPU	Intel® Celeron M - 1GHz FANLESS
System memory	
RAM	512 MB - 1 GB
Flash array (Compact flash)	1 GB - 2 GB
Disk Drive	
Hard disk	160 GB Serial ATA
Solid State Disk (SSD)	8 GB Serial ATA
Interfaces	
Serial port	2 x RS232
USB port	5 x 2.0 (one frontal)
PS/2 keyboard port	1
PS/2 mouse port	1
VGA port for external monitor	1
Audio ports	Integrated Stereo Speakers and Microphone MIC-IN and LINE-OUT connectors
Networks	
Ethernet	Ethernet 10/100 Mbit
Dimensions	
External (mm) (W x H x D)	452 x 342 x 76
Clock	
Supercapacitor Hardware Clock	With battery
Technical specifications	
Power supply	18...30 Vcc
Consumption (24 Vcc)	max 70 W
Protection level (with cover)	IP 40 frontal
Operating temperature (°C)	0...+50
Storage/transport temperat. (°C)	-20...+65
Humidity (non condensing)	85%
Weight (kg)	~ 7
Certifications	CE, cULus (in progress)
Wall box	
Dimensions (mm) (W x H x D)	433 x 332 x 80
Wall box product code	YBD00

Hardware Configuration

The purchase codes with possible configurations of the product are given in the following table :

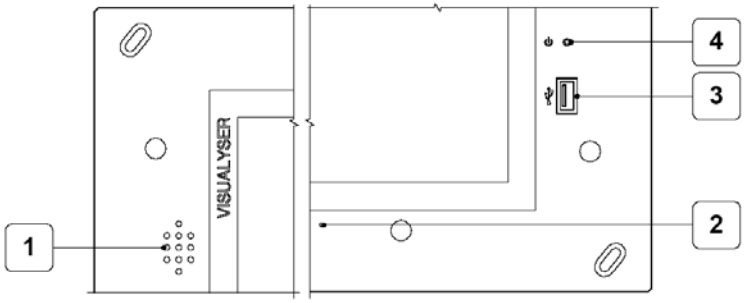


Operational System

The purchase codes with possible configurations of the product are given in the following table :

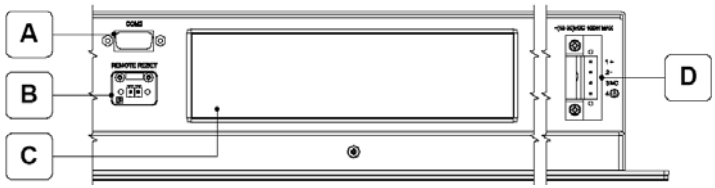
XSSYSWINXPEEN03	Windows XP Embedded EN (single partition)
XSSYSWINXPEEN04	Windows XP Embedded EN (double partition)
XSSYSWINXPPML00	Windows XP Professional SP3 (Multilanguage)

Front



1	2 x Altoparlante 2 x Speaker 2 x haut-parleur 2 x Lautsprecher 2 x Altavoz	3	Porta seriale USB USB port Port USB USB-Schnittstelle Puerto USB
2	Microfono Microphone Microphone Mikrofon Micrófono	4	**ATX power on switch** Vedi manuale scheda madre See motherboard manual Voir le manuel de la carte mère Siehe Gebrauchsanweisung der Hauptplatine Ver el manual de la placa base

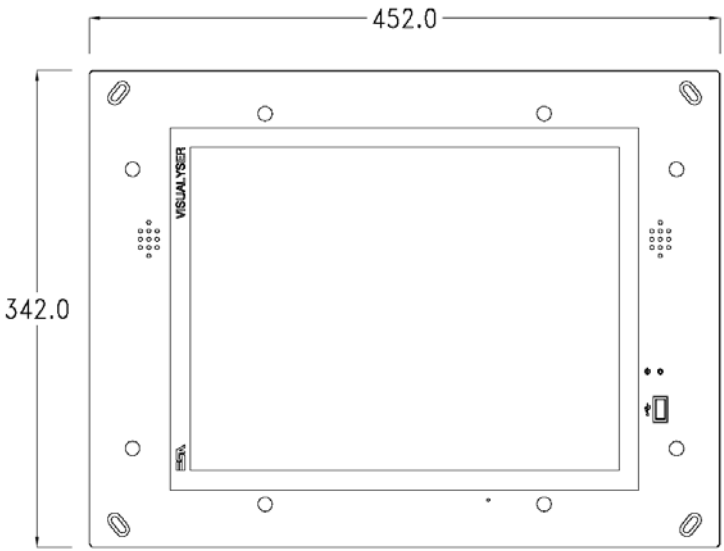
Rear



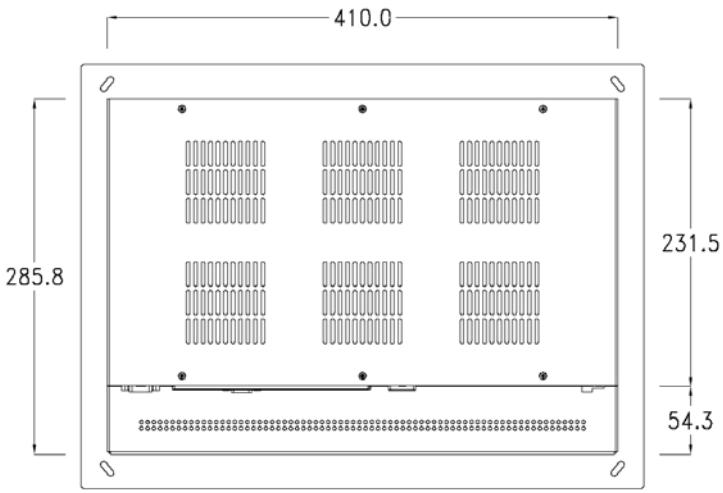
A	**COM2** Vedi manuale scheda madre See motherboard manual Voir le manuel de la carte mère Siehe Gebrauchsanweisung der Hauptplatine Ver el manual de la placa base	C	Vedi manuale scheda madre See motherboard manual Voir le manuel de la carte mère Siehe Gebrauchsanweisung der Hauptplatine Ver el manual de la placa base
B	**REMOTE RESET** Vedi manuale scheda madre See motherboard manual Voir le manuel de la carte mère Siehe Gebrauchsanweisung der Hauptplatine Ver el manual de la placa base	D	Alimentazione Power supply Aalimentation Spannungsversorgung Alimentación

Drilling template

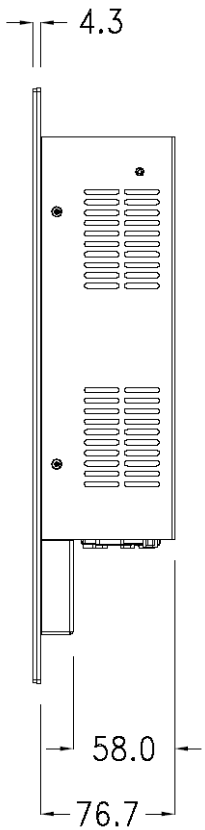
Front



Rear

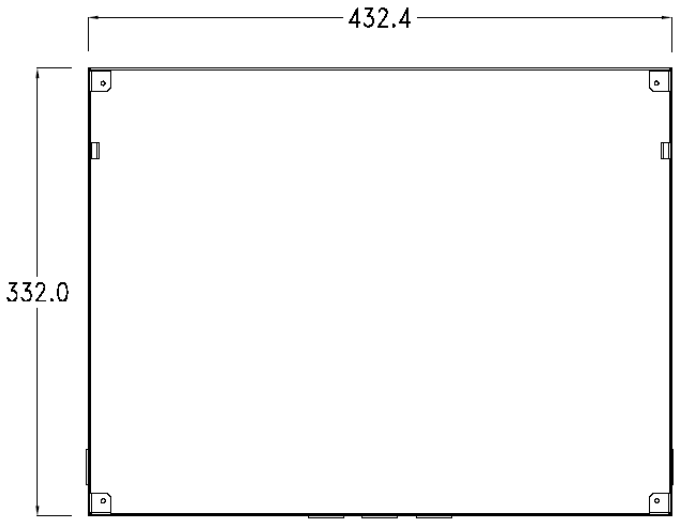


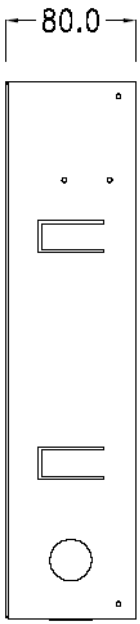
Side



Wall box

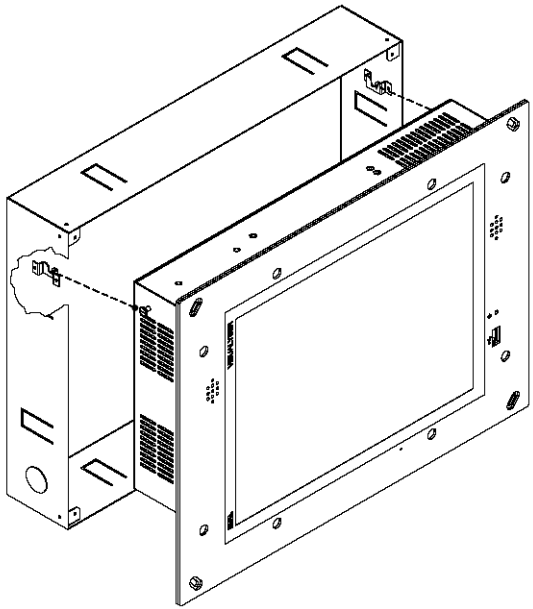
ESA supplies the wall box (order code: YBD00) for fixing the terminal :





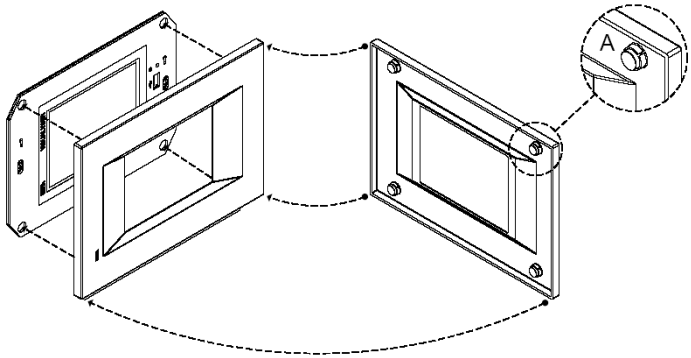
Panel mounting

After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.
For fixing use appropriate screws contained in the terminal packing kit:



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :



For the terminal described in this chapter, ESA supplies the "Classic" line plates, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

Plate Assembly **Horizontal assembly**

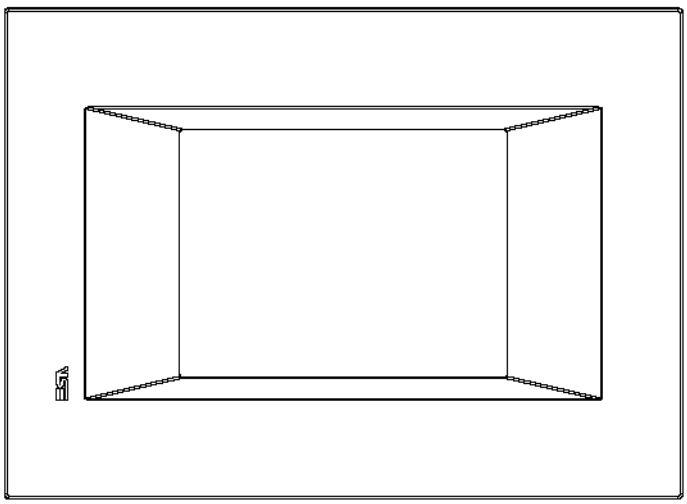
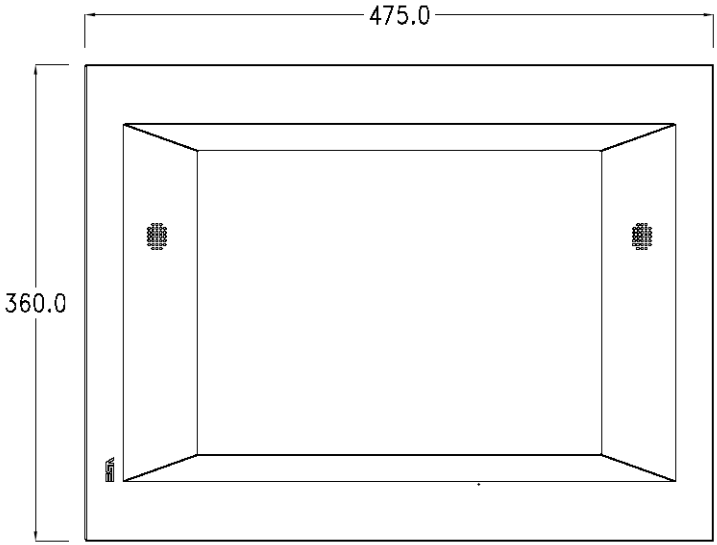
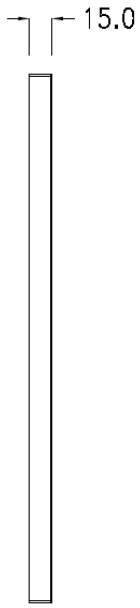


Plate dimensions **Front (Classic line plate)**



Side (Classic line plate)



Order codes

For the terminal described in this chapter, the codes of the purchasable plates are the following:

YCDLFXXXXXXX (Classic line)

11. Communication ports

All terminals communicate with other equipment by means of serial communication (RS485), USB, ETH-10/100. Reported below are the individual ports with the type of communication and meaning of the connection pins.

General notes

The serial communications are greatly affected by interference. Top-quality shielded cables must be used to limit the effects of interference to a maximum.

Visualyser YG4-YT4 communication ports :

RS485

3 pin connector

1	Tx Rx485 +IN/OUT
2	Tx Rx485 –IN/OUT
3	Signal GND

USB-B

4 pin male connector

1	USBVCC (IN)
2	USBD-
3	USBD+
4	Signal GND

ETH 10/100

RJ45 8 pin female connector

1	TX+
2	TX-
3	RX+
4	N.C.
5	N.C.
6	RX-
7	N.C.
8	N.C.

N.C. : Not connected.

Visualyser YT5-YT7-YTA communication ports :

USB-A

4 pin male connector

1	USBVCC (OUT)
2	USBD-
3	USBD+
4	Signal GND

USB-B

4 pin male connector

1	USBVCC (IN)
2	USBD-
3	USBD+
4	Signal GND

ETH 10/100

RJ45 8 pin female connector

1	TX+
2	TX-
3	RX+
4	N.C.
5	N.C.
6	RX-
7	N.C.
8	N.C.

N.C. : Not connected.

RS485

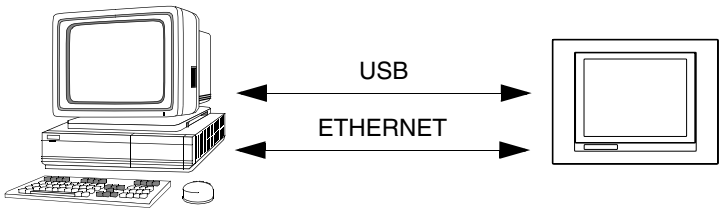
3 pin connector

1	Tx Rx485 +IN/OUT
2	Tx Rx485 –IN/OUT
3	Signal GND

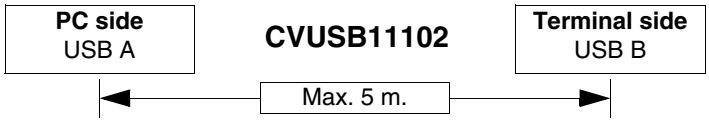
For the communication ports of the YXD terminal, consult the main board manual.

PC Terminal <-> Connection

The connection of the terminal with the PC is indispensable for the transfer of the communication firmware, of the communication driver and of the project (see Software Manual) and can take place by means of the USB Port or Ethernet.

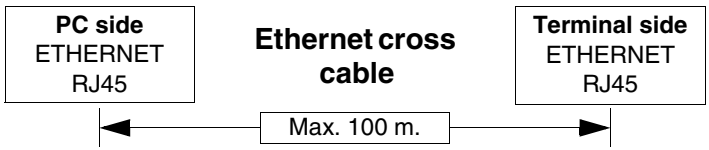


The connection cables are shown below.

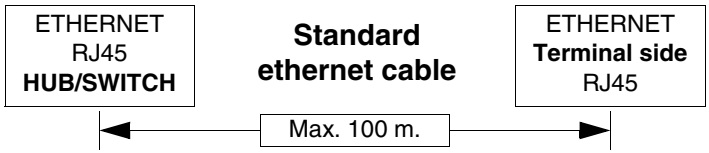


If a connection is to be made using the RJ45 Ethernet port there are two methods and two cables to use.

If the PC is directly connected to the terminal, use a crossed Ethernet cable



If the terminal is connected to a hub, a switch or directly to a network, use a normal Ethernet cable.


ETHERNET
RJ45
HUB/SWITCH
Standard ethernet cable
ETHERNET
Terminal side
RJ45
Max. 100 m.

12. Connection cables

General notes

All terminals communicate with the other appliances by serial communication.
As serial communications are greatly affected by interference, top-quality shielded cables must be used in order to limit the influence of interference to a maximum.

The table below shows the features of the cable that is recommended for use for the serial connection.

Features of the serial connection cable	
Resistance in direct current	Max. 151 Ohm/Km
Capacitive coupling	Max. 29pF/m
Shielding	> 80% or Total

Great attention must be paid in the choice and laying of the cables, especially regarding the serial connection cable.

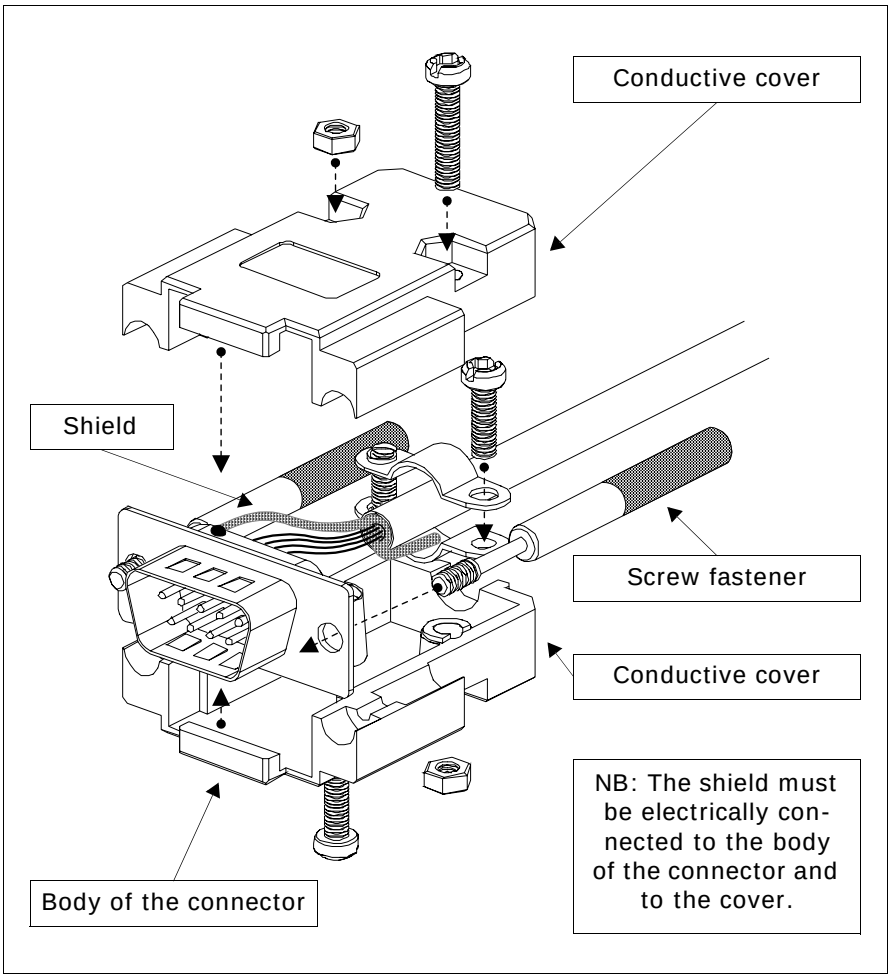
In all cases:
Look for the shortest route
Lay disturbed cables separately

Disconnect the power supplies before connecting or disconnecting the communication cables to prevent any damage to the terminals and/or the device connected.

Connection of the cable shield

The correct shielding of the interface cables between the terminals and the devices connected to it, is indispensable in order to guarantee a serial communication without any type of external interference, therefore, all cables stated in this manual must be the shielded type and tank containers must have a metal or plastic conductive case.

The correct method of connecting the shielding is shown in the lay-out below.



The interface cable shield must be electrically connected to the case and to the body of the connector itself from both sides of the cable.

If it is not possible to connect the shield due to the type of particular serial connector, the shielding itself must be taken externally to the connector and connected to the earth clamp.

The same operation must also be performed if the body of the Device serial connector, even if standard, is not electrically connected to the earth clamp of the PLC itself.

It is, however, intended that also in this condition the shield must be connected to the case and the body of the connector.

Some cable shields have the pin configuration of the Device side shielding signals: in these cases, considering the above, the shield must also be connected.
In all cases the connection of the Terminal side shield (pin 1) must never be carried out.

Earth potentials obtained from DIN guides, machine framework, doors of the electric control boards etc. are not allowed and it is a good ides to avoid equipotential earth bars where earths converge coming from inverter, drive, step-by-step motor type loads and all those loads that generally can be a source of great interference..

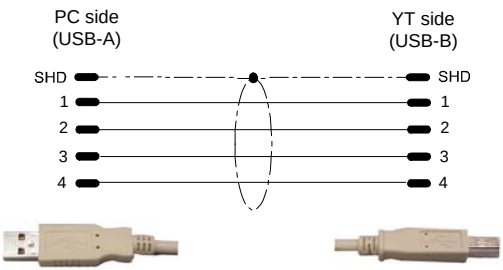
The failure to comply with these indications can jeopardise the compatibility of the YT-PLC system with EMC regulations in force.

USB-A / USB-B PROGRAMMING CABLE

PC SIDE (USB-A) :

VISUALYSER SIDE (USB-B) :

Order code:
CVUSB11102



PC USB-A / YT USB-B PROGRAMMING CABLE

Connection cables

13. Resistance to chemical substances

Chemical substances

The table below shows a summary of all substances used for the test with the various results.

The table must however be considered an approximate guide regarding resistance to chemical substances. Tests have never been performed on an entirely assembled terminal.

Table 0.1: Resistance to chemical substances (Part 1 of 2)

Substance		Parts of the terminal					
		Film[2] matt	Film[1] transparent	Touch [2] screen	Glass	Gaskets	Resistance
Vinegar	NS	--	D	--	--	--	☹
Water	NS	>24h	--	--	--	E	☺
Salt water	NS	--	--	--	--	E	☺
Benzylalcohol	NS	O	--	O	--	--	☹
Ammonia	NS	--	--	--	--	E	☺
	<2%	>24h	--	>24h	--	--	☺
	5%	--	--	--	>24h	--	☺
	10%	--	--	--	--	--	☺
	35%	--	--	--	--	--	☺
Fabric softener	NS	>24h	--	>24h	--	--	☺
Carbon Dioxide	NS	--	--	--	--	E	☺
Petrol	NS	--	A	>24h	>24h	F	😐
Dichromate	NS	--	--	>24h	--	--	☺

Key:
A - No visible deterioration, B - Very slight deterioration, C - Slight deterioration, D - Great visible damage, E - Unlimited use, F - Limited use, G - Use not recommended, S - The film loosens, X - The film has bubbles, O - The film is destroyed, CO - Concentrated, HC - High Concentration, LC - Low concentration SA - Saturo/a, NS - Not specified, h - Hour/s, M - Month/s, Y- Year/s, ☺ - All elements tested resist the substances, 😐 - At least one of the elements tested can be deteriorated by the substance in question, ☹ - All of the elements tested are damaged by the substance in question, -- Not tested.

Note:
1 - According to Alcatel Bell, 2 - According to DIN42115 Part 2, 3 - According to the producer of raw materials, 4 - Tested at 50°C

Table 0.1: Resistance to chemical substances (Part 2 of 2)

Substance		Parts of the terminal					
		Film[2] matt	Film[1] transparent	Touch [2] screen	Glass	Gaskets	Resistance
Sodium Carbonate	SA	>24h	--	--	--	--	☺
Chlorine	NS	--	--	--	--	G	☹
Sodium Chloride	3%	--	--	--	--	--	☺
Coca Cola	NS	--	A	--	--	--	☺
Detergent	NS	--	A	--	--	--	☺
Detersive	NS	>24h	--	>24h	--	E	☺
Diesel	NS	>24h	A	>24h	--	--	☺
Milk	NS	>24h[4]	--	>24h[4]	--	--	☺
Hydraulic liquids	NS	--	--	--	--	F	😐
Edible oil	NS	--	--	--	--	--	☺
Linseed oil	NS	>24h	--	>24h	--	--	☺
Tomato sauce	NS	B[4]	--	B[4]	--	--	😐
Senape	NS	>24h[4]	--	>24h[4]	--	--	☺
Solution with cooking salt	NS	--	--	--	--	E	☺
Lemon juice	NS	B[4]	--	B[4]	--	--	😐
Tomato juice	NS	B[4]	--	B[4]	--	--	😐
Grape juice	NS	>24h[4]	--	>24h[4]	--	--	☺

Key:
A - No visible deterioration, B - Very slight deterioration, C - Slight deterioration, D - Great visible damage, E - Unlimited use, F - Limited use, G - Use not recommended, S - The film loosens, X - The film has bubbles, O - The film is destroyed, CO - Concentrated, HC - High Concentration, LC - Low concentration SA - Saturo/a, NS - Not specified, h - Hour/s, M - Month/s, Y- Year/s, ☺ - All elements tested resist the substances, 😐 - At least one of the elements tested can be deteriorated by the substance in question, ☹ - All of the elements tested are damaged by the substance in question, -- Not tested.

Note:
1 - According to Alcatel Bell, 2 - According to DIN42115 Part 2, 3 - According to the producer of raw materials, 4 - Tested at 50°C

Cleaning the terminal

The use of Denatured Ethyl Alcohol is recommended to clean the terminal. If this should not be sufficient to remove deposits and other products must be used, consult the table given above.

14. After-sales assistance

In the case of problems linked to use of the terminal, please contact out Customer Care service. The service is available on working days during office hours.

Customer Care

Customer Care can be contacted by:

Telephone: ++39-031757400
Fax: ++39-031751777
E-Mail: customer.care@esahmi.com
Web Site: http://www.esahmi.com

Product return

If the terminal must be sent back for repairs:

Contact the Customer Care service for authorisation regarding return.
Fill in the file accompanying the product completely.

Customer Care will supply all explanations necessary for returning the piece.

!!! IMPORTANT !!!

ESA elettronica will accept:
carriage paid goods (transport expenses paid by the customer).
carriage forward goods (transport expenses paid by ESA) **with previous authorisation**.
ESA elettronica will not accept:
no unauthorised carriage forward goods.

It is not necessary to send connectors, cables and accessories (unless connected to the problem indicated).

Thank you for your collaboration.

REPAIR RETURN ACCOMPANYING FORM
ATTENTION!!! The form must be filled-in using block letters.

Product: ..... **S/N:** □□-□□-□□□□□

Customer Data (Introduction compulsory)

Who filling the form in: .....

Company : .....

Address : ..... P.code .....

Locality : ..... Province: .....

Telephone : ..... Fax: .....

Name of person to contact (If different to Customer Data)

Person: .....

Telephone: ..... Fax: .....

Information regarding the product (Introduction compulsory)

Device Connected: .....

Detailed description of the problem and conditions when it occurs:

.....

.....

.....

.....

Note: .....

.....

.....

Customer Care Staff contact: .....

Date form filled-in: ...../...../..... Signature: .....