



### Applications:

- Plastic Extrusion
- Heat treatment
- Metal

### Main characteristics:

- Control Panel with integrated HMI
- One programming environment.
- 10.4", 12.1" and 15" color display, resistive touch screen
- horizontal or vertical installation
- IP65 front panel protection level
- wide range of communication ports and protocols

<b>Code</b>	According to model (see order code)
<b>Model Number</b>	According to model (see order code)
<b>Brief description</b>	Control Panel with display and resistive touch screen

## PROFILE

The eView LT Control Panel lets you display, set, and manage all of the machine or system automation data. The operator uses a color touch screen. Depending on the model, the screen size can be 10.4", 12.1" and 15", either horizontal or vertical. The use of an Intel ATOM low-consumption processor, plus an extremely efficient design (no fans or moving parts), eliminates all maintenance. The processor can run at either 1 GHz or 1.3 GHz.

The Control Panel has several communication ports (USB, Ethernet, RS232, RS485 and CAN) and different protocols (Ethercat (Master), GDNET (Master), Modbus TCP/IP (Master/Slave), CANopen (Master), Modbus RTU (Master/Slave)). The 2 GB internal mass memory can be expanded with SD cards.

Programming is done with a single development tool: GF\_Project VX, which ensures complete and fast management of application software by means of the five standard IEC61131-3 languages and a powerful graphic editor.

In combination with I/Os, eView LT completes the management and control of process and automation. It manages sequences and work processes, and sets and displays data and connectivity.

In addition, there is a series of specific application templates, user-friendly and easily customizable, for the plastics and heat treatment industries.

# ARCHITECTURE

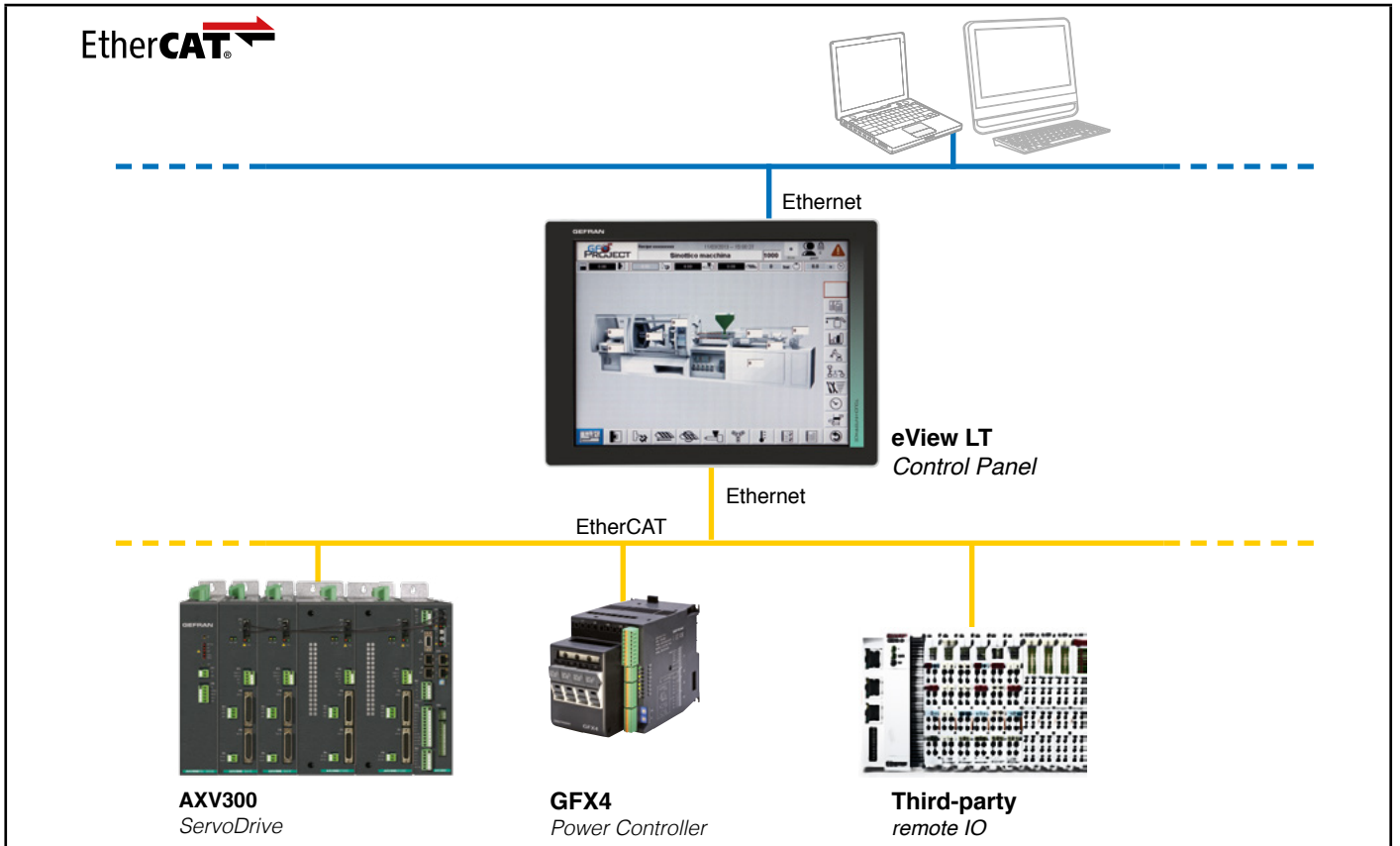


Figure 1 - Ethernet - EtherCAT architecture

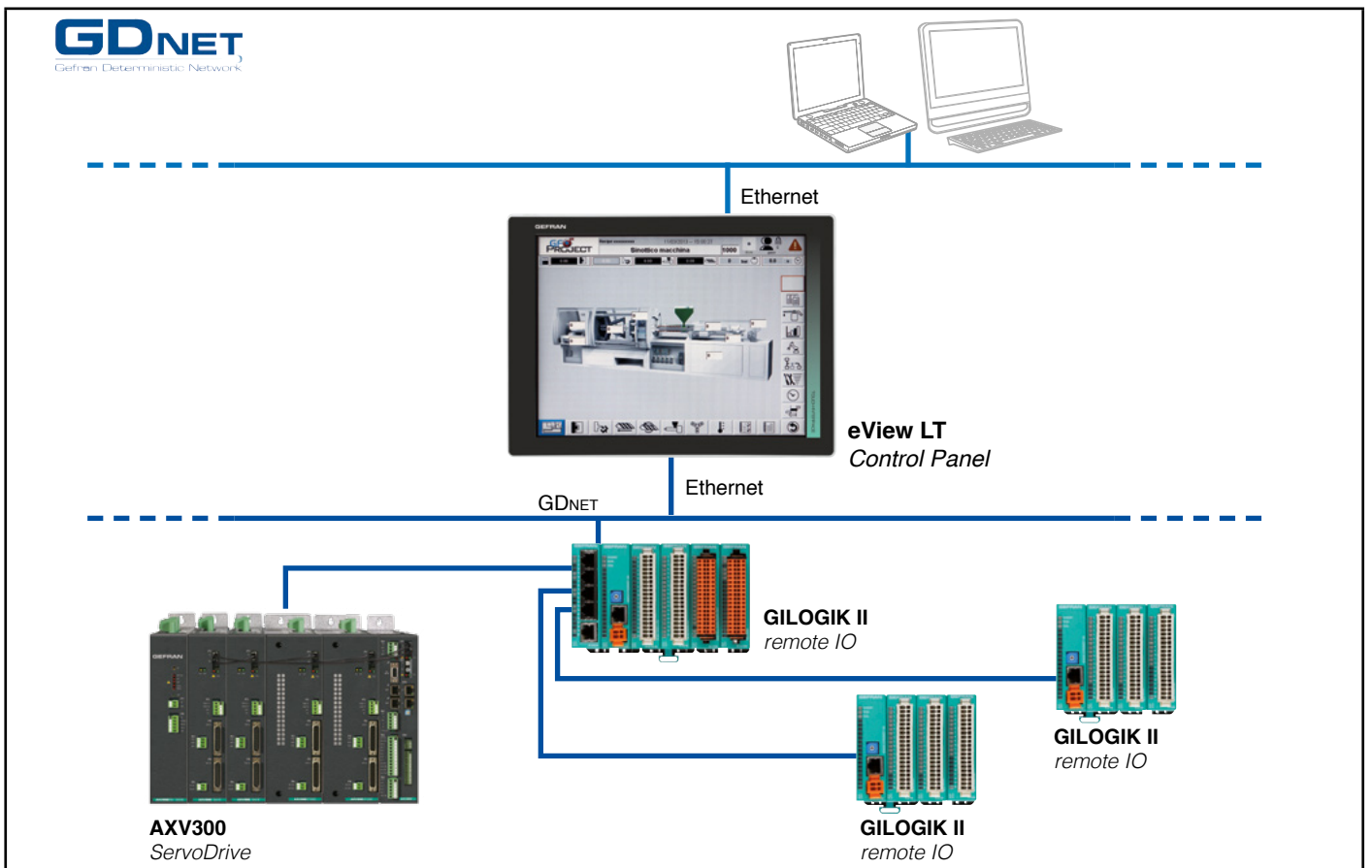


Figure 2 - Ethernet - GDNET architecture

# CANopen

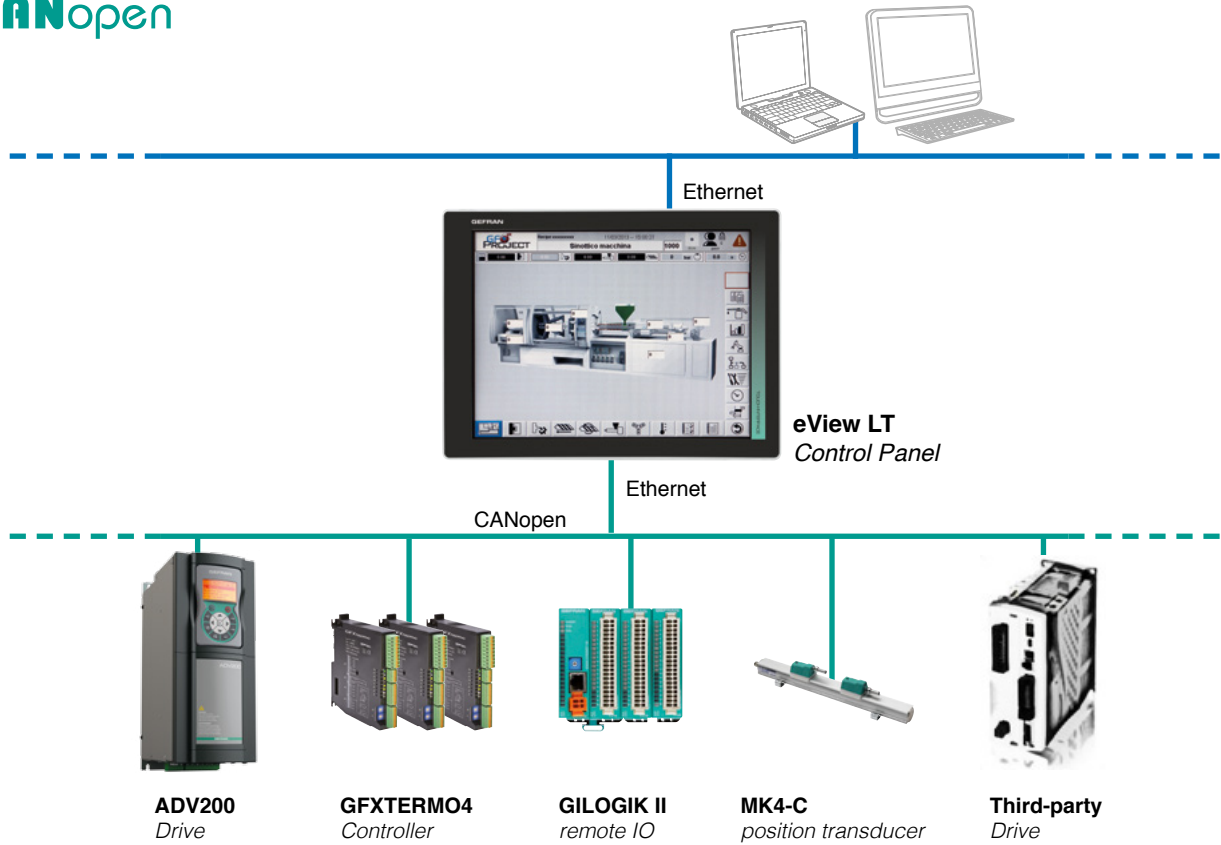


Figure 3 - Ethernet - CAN (CANopen) architecture

# Modbus/TCP

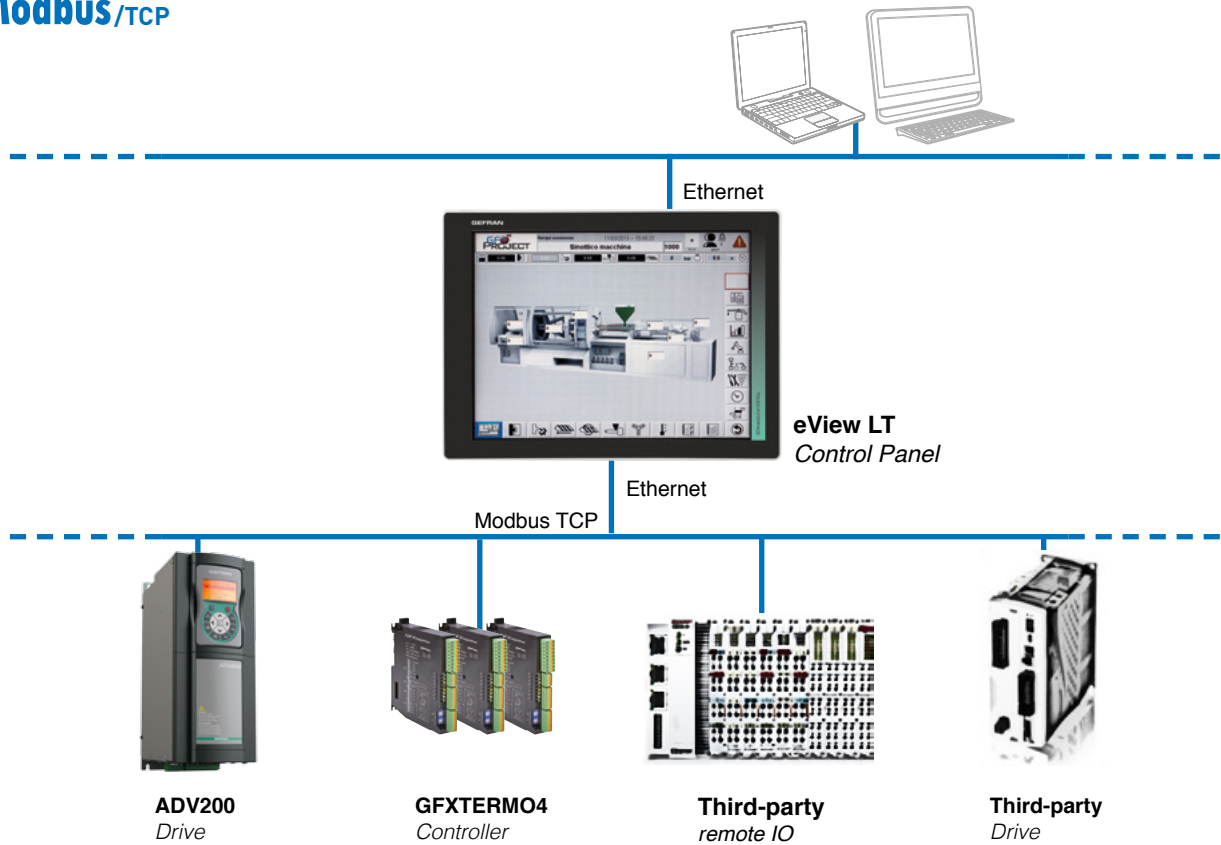


Figure 4 - Ethernet – Modbus TCP architecture

# Modbus/RTU

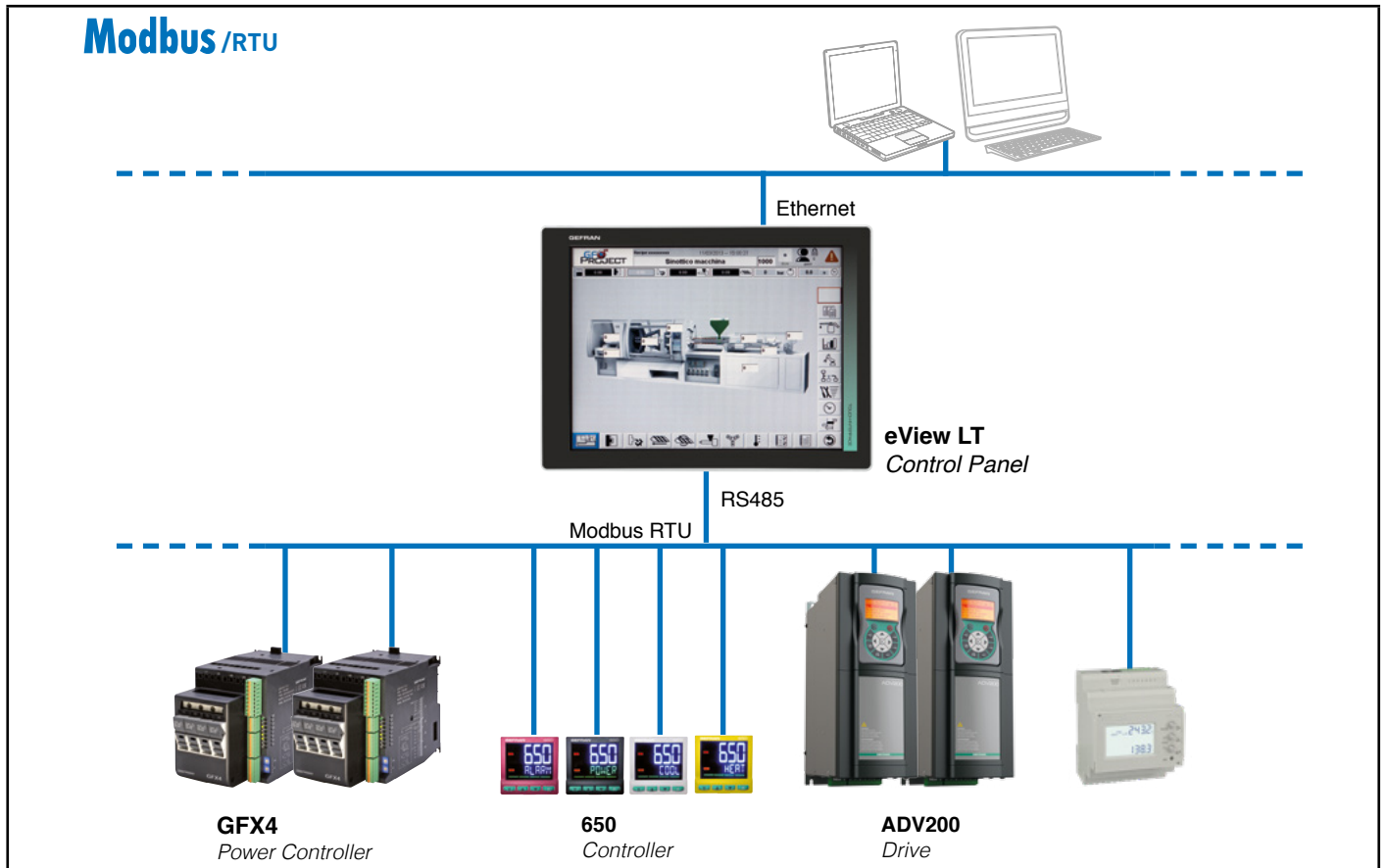


Figure 5 - Example of Ethernet - Modbus RTU (RS485) architecture

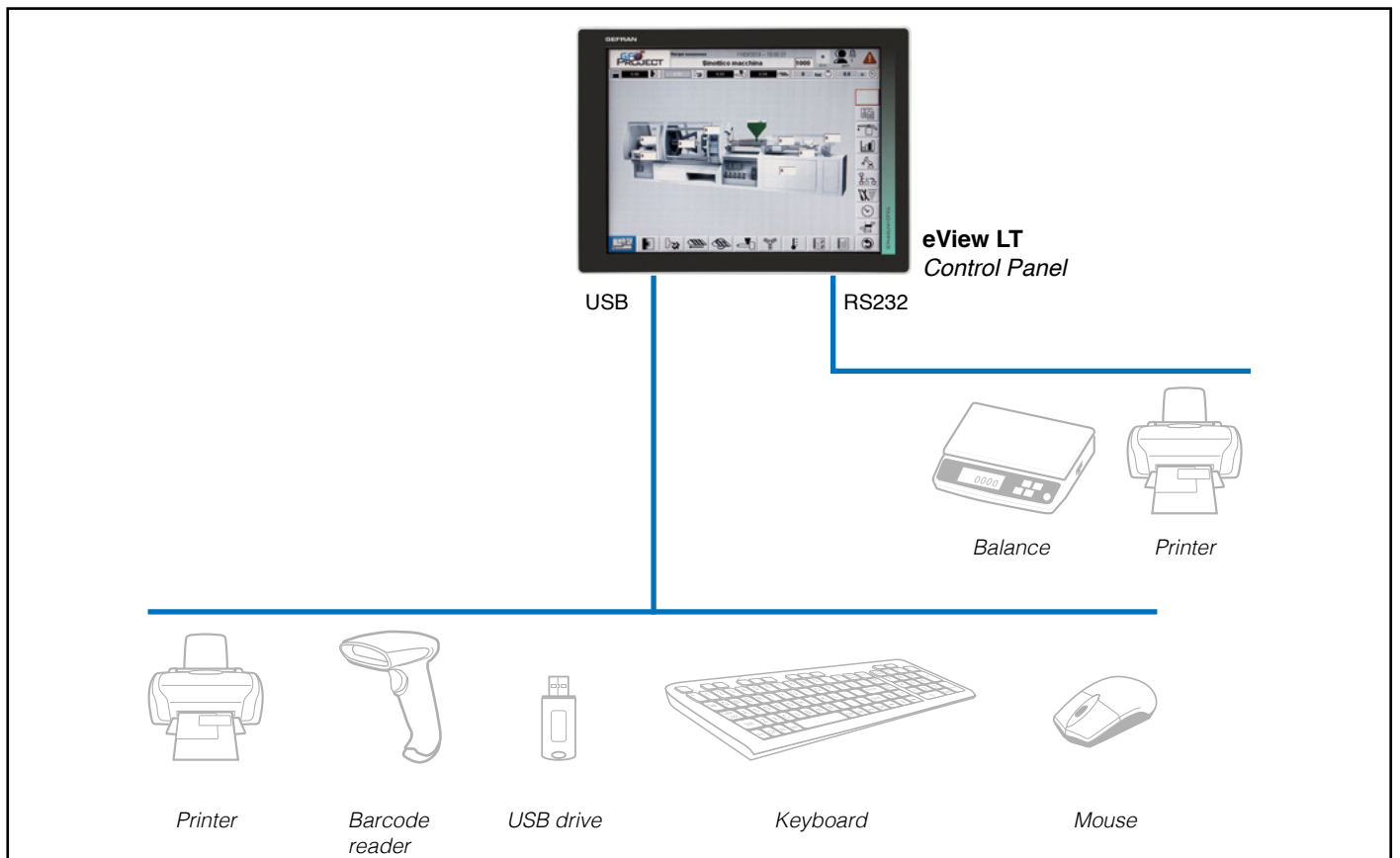


Figure 6 - Example with USB and RS232 ports

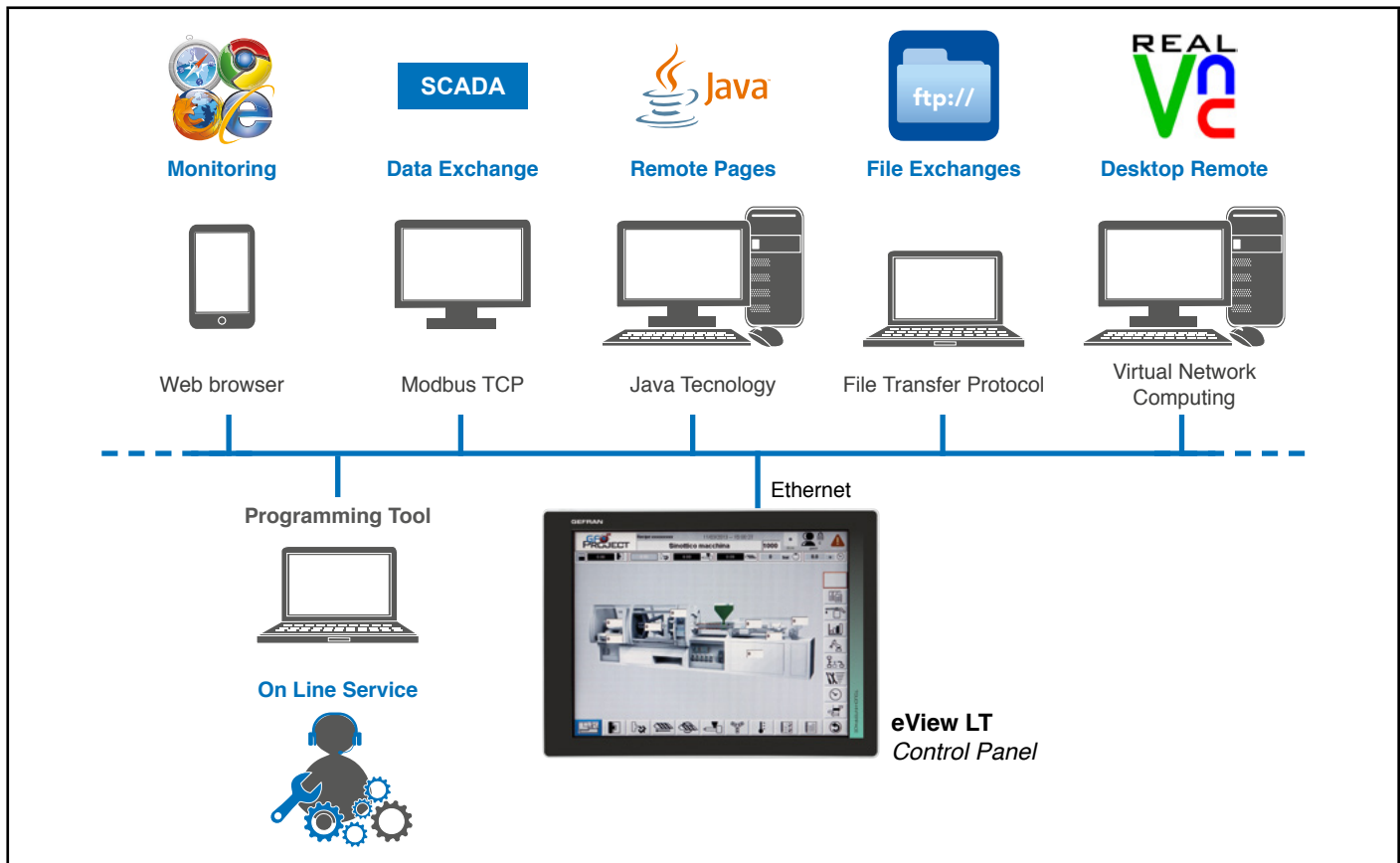


Figura 7 - Examples of remote services

## TECHNICAL DATA

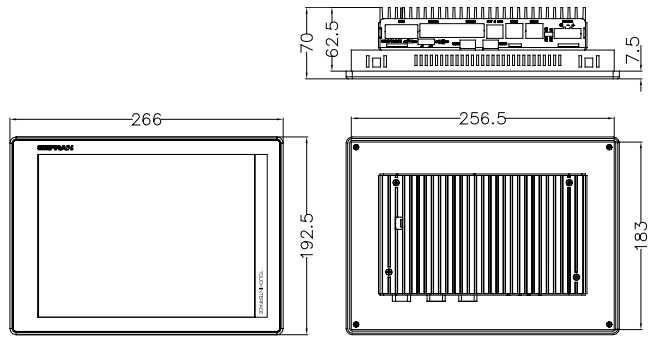
		eView LT104	eView LT121	eView LT150
<b>POWER SUPPLY</b>	Operating voltage	24 VDC ±25%		
	Current draw (at 24 VDC)	700 mA max	1000 mA max	1100 mA max
	Power dissipation	17 W max	24 W max	26.5 W max
	Protections	Polarity inversion Short circuit		
	Connection	3-pin polarized removable connector Screw terminals, max cable section 2.5 mm <sup>2</sup>		
<b>CONNECTIONS</b>	Ethernet port (ETH)	Number of channels: 2 max (1 optional) Connector: RJ45 Velocity: 10 / 100 / 1000 Mbit/s Signals: green connection LED, yellow data LED		
	KEY & LED port	Connector: RJ45 Standard: USB2.0		
	RS-232 port (optional)	Connettore: DB9 M Velocità: 1.2kbit/s...115kbit/s		
	RS-485 port (optional)	Optically isolated Connector: DB9 M Speed: 9 kbit/s ... 19 kbit/s Terminations and polarization: internal, selectable with jumper		
	CAN port (optional)	Optically isolated Connector: DB9 M Speed: 20, 50, 100, 125, 250, 500, 1000 kbit/s, default 500 kbit/s Termination: internal, selectable with jumper		
	USB port	Number of ports: 2 max Connector: type A Standard: USB 2.0 Protection: overload		
<b>COMMUNICATION PROTOCOLS</b>	Ethernet	FTP (File Transfer Protocol) Modbus TCP/IP Master/Slave Ethercat Master GDNET Master		
	CAN	CANopen Master		
	Modbus	Modbus RTU Master/Slave		
<b>DISPLAY</b>	Size (diagonal)	10,4"	12,1"	15"
	Format	4:3		
	Pixel resolution	800 × 600		1024 × 768
	Screen area (L x H)	211,2 × 158,4 mm	246,0 × 187,5 mm	304,1 × 228,1 mm
	Colors	256 K / 18 bit		16 M / 24 bit
	Luminosity	400 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	500 cd/m <sup>2</sup>
	Contrast	500:1		1500:1
	Backlighting	White LEDs life 30.000 ore @ 25 °C	White LEDs life 50.000 ore @ 25 °C	
Visual angle	Horizontal: 70° - 70° Vertical: 50° - 60°	Horizontal: 89° - 89° Vertical: 89° - 89°	Horizontal: 70° - 85° Vertical: 70° - 85°	
<b>CONFIGURATION ELEMENTS</b>	Access to software procedures	16-position rotary switch		
	Touch screen calibration	Via software on product		
<b>CONTROL ELEMENTS</b>	Touch screen	4-wire resistive technology		
<b>VIEWING ELEMENTS</b>	Diagnostics	PW LED (yellow): power supply on RN LED (green): PLC program state LED E1 (red): HW Watchdog state LED E2 (red): PLC program error		

		eView LT104	eView LT121	eView LT150
<b>MICROPROCESSOR</b>	Type and frequency	ATOM E640 1 GHz ATOM E660, 1.3 GHz		
<b>MEMORY</b>	System	512 MB, DRAM type DDR II		
	Mass	2 GB Flash memory		
	Mass extension	SD Card Slot *		
<b>AMBIENT CONDITIONS</b>	Operating temperature	0 ... +55 °C (as per IEC 68-2-14)		
	Storage temperature	-20 ... +70 °C (as per IEC 68-2-14)		
	Relative humidity	max 95% RH non condensing (as per IEC 68-2-3)		
	Vibrations	5 to 9 Hz: sine constant 3.5 mm 10 to 150 Hz: sine acceleration 1G		
<b>ASSEMBLY</b>		Built-in, in control boards or panels		
<b>PROTECTION LEVEL</b>		IP 65 on front panel (as per IEC 68-2-3)		
<b>WEIGHT</b>		1,650 kg	2,300 kg	2,850 kg
<b>CE STANDARDS</b>	EMC (electromagnetic compatibility)	Conforms to Directive 2014/30/EU EN61131-2: Programmable controllers Part 2: Equipment requirements and tests.		

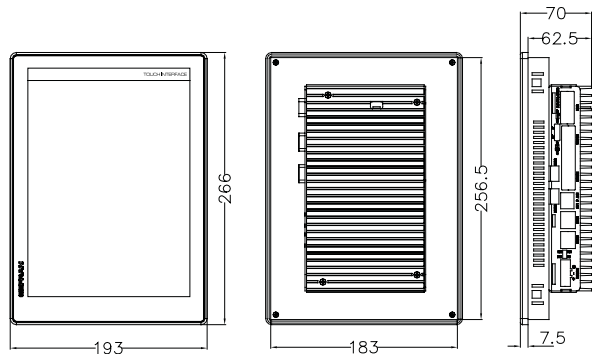
\* SD card not supplied. Available as accessory

# DIMENSIONS AND SPACES REQUIRED FOR INSTALLATION

## eView LT104: horizontal installation

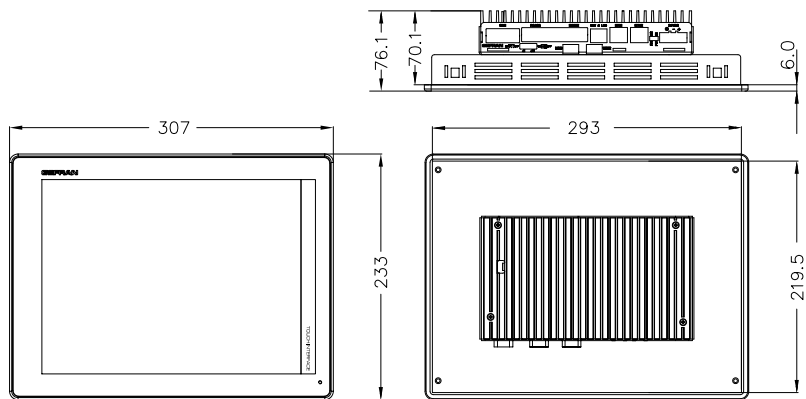


## eView LT104: vertical installation

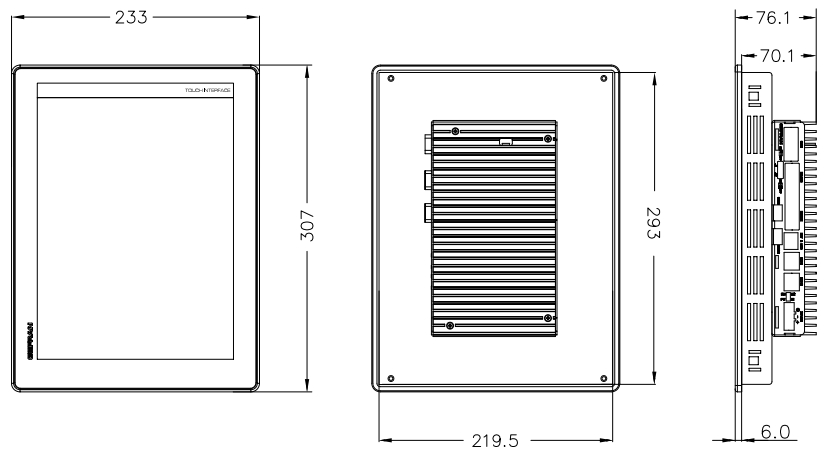


Dimensions in mm

## eView LT121: horizontal installation



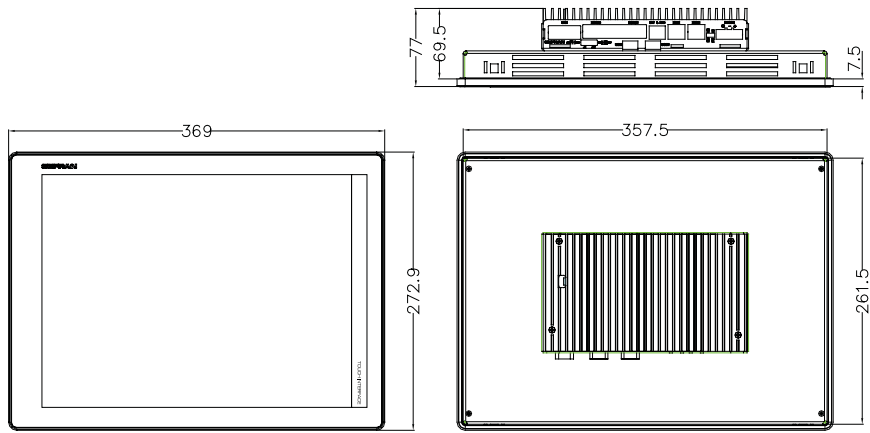
## eView LT121: vertical installation



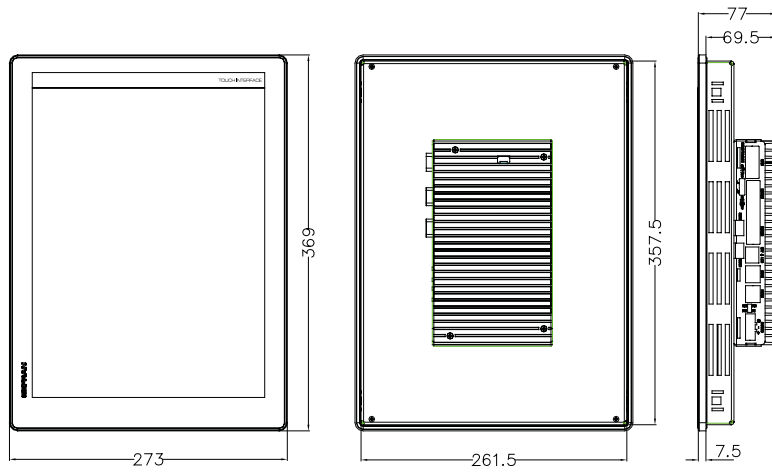
Dimensions in mm



**eView LT150: horizontal installation**



**eView LT150: vertical installation**



Dimensions in mm

Figure 8 - Dimensions eView LT

## ORDER CODES

### BASIC VERSION - eView LT104 with integrated control panel.

10,4" color display, resistive touch screen, Atom 1 GHz, 512 MB RAM, 2 GB flash memory, 1 x Ethernet (Modbus TCP + GDnet), 2 x USB, 2 x eKMxx keyboard

eView LT104

20

00

00

00

Memory	
Processor : ATOM 1 GHz DOM: 2 GB RAM: 512MB	20
Processor : ATOM 1.3GHz DOM: 2 GB RAM: 512MB	30
expansion 1	
absent	00
Ethernet Real Time GDNET	E1
Ethernet Real Time Ethercat\GDNET	E2 <sup>(1)</sup>
expansion 2	
absent	00
RS232 + RS485	S1
expansion 3	
absent	00
CAN	C1

(1) only with ATOM 1.3 GHZ processor

### BASIC VERSION - eView LT121 with integrated control panel.

12,1" color display, resistive touch screen, Atom 1 GHz, 512 MB RAM, 2 GB flash memory, 1 x Ethernet (Modbus TCP + GDnet), 2 x USB, 2 x eKMxx keyboard

eView LT121

20

E1

00

00

Memory	
Processor : ATOM 1 GHz DOM: 2 GB RAM: 512MB	20
Processor : ATOM 1.3GHz DOM: 2 GB RAM: 512MB	30
expansion 1	
absent	00
Ethernet Real Time GDNET	E1
Ethernet Real Time Ethercat\GDNET	E2 <sup>(1)</sup>
expansion 2	
absent	00
RS232 + RS485	S1
expansion 3	
absent	00
CAN	C1

(1) only with ATOM 1.3 GHZ processor

**BASIC VERSION - eView LT150 with integrated control panel.**  
**15" color display, resistive touch screen, Atom 1 GHz, 512 MB RAM, 2 GB flash memory, 1 x Ethernet (Modbus TCP + GDnet), 2 x USB, 2 x eKMxx keyboard**

eView LT150

**20**    **E1**    **00**    **00**

**Memory**

Processor : ATOM 1 GHz DOM: 2 GB RAM: 512MB	<b>20</b>
Processor : ATOM 1.3GHz DOM: 2 GB RAM: 512MB	<b>30</b>

**expansion 1**

absent	<b>00</b>
Ethernet Real Time GDNET	<b>E1</b>
Ethernet Real Time Ethercat\GDNET	<b>E2<sup>(1)</sup></b>

**expansion 2**

absent	<b>00</b>
RS232 + RS485	<b>S1</b>

**expansion 3**

absent	<b>00</b>
CAN	<b>C1</b>

(1) only with ATOM 1.3 GHZ processor

## EXAMPLES OF ORDER CODES

**eView LT104 with integrated control panel.**

**10.4" color display, resistive touch screen, Atom 1 GHz, 512 MB RAM, 2 GB flash memory**

Code	Model Number	Description
F065733	eView LT104-20-E1-00-00	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx
F065704	eView LT104-20-E1-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)

**eView LT104 with integrated control panel.**

**10.4" color display, resistive touch screen, Atom 1.3 GHz, 512 MB RAM, 2 GB flash memory,**

Code	Model Number	Description
F065739	eView LT104-30-E1-00-00	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx
F065743	eView LT104-30-E1-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)
F068164	eView LT104-30-E2-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNet\EtherCAT), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)

**View LT121 with integrated control panel.**

**12,1" color display, resistive touch screen, Atom 1 GHz, 512 MB RAM, 2 GB flash memory**

Code	Model Number	Description
F069961	eView LT121-20-E1-00-00	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx
F070167	eView LT121-20-E1-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)

**eView LT121 with integrated control panel.**

**12,1" color display, resistive touch screen, Atom 1.3 GHz, 512 MB RAM, 2 GB flash memory,**

Code	Model Number	Description
F070169	eView LT121-30-E1-00-00	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx
F070170	eView LT121-30-E1-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)
F070171	eView LT121-30-E2-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNet\EtherCAT), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)

**eView LT150 with integrated control panel.**

**15" color display, resistive touch screen, Atom 1 GHz, 512 MB RAM, 2 GB flash memory**

Code	Model Number	Description
F065746	eView LT150-20-E1-00-00	periferiche di comunicazione 2 x Ethernet (Modbus TCP, GDNET), 2 x USB, 1 x keyboard eKMxx
F065750	eView LT150-20-E1-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNET), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)

**eView LT150 with integrated control panel.**

**15" color display, resistive touch screen, Atom 1.3 GHz, 512 MB RAM, 2 GB flash memory**

Code	Model Number	Description
F065752	eView LT150-30-E1-00-00	communication peripherals 2 x Ethernet (Modbus TCP, GDNET), 2 x USB, 1 x keyboard eKMxx
F065705	eView LT150-30-E1-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNET), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)
F065707	eView LT150-30-E2-S1-C1	communication peripherals 2 x Ethernet (Modbus TCP, GDNET\EtherCAT), 2 x USB, 1 x keyboard eKMxx, 1 x RS232, 1 x RS485, 1 x CAN (CANopen)

## ACCESSORIES

Code	Model Number	Description
F067830	KIT_INSTA_eView	Installation kit (fastening blocks + ferrite + power supply connector)
F067831	CAV_USB_PANEL_1m	USB cable to panel L = 1 m
F057777	SD_CARD1G	SD Card 1GB
F057679	USB_PEN1G	1 GB USB key