

# **AXM** view

# Control panel



#### Applications:

- Plastic extrusion
- Plastic injection
  Heat treatment
- Heat treatment
- Metal

#### Main characteristics:

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

Code	According to model (see order code)	
Brief description Control Panel with display and resistive touch screen		

#### PROFILE

The AXM view 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 or 15". 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 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, AXM view 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

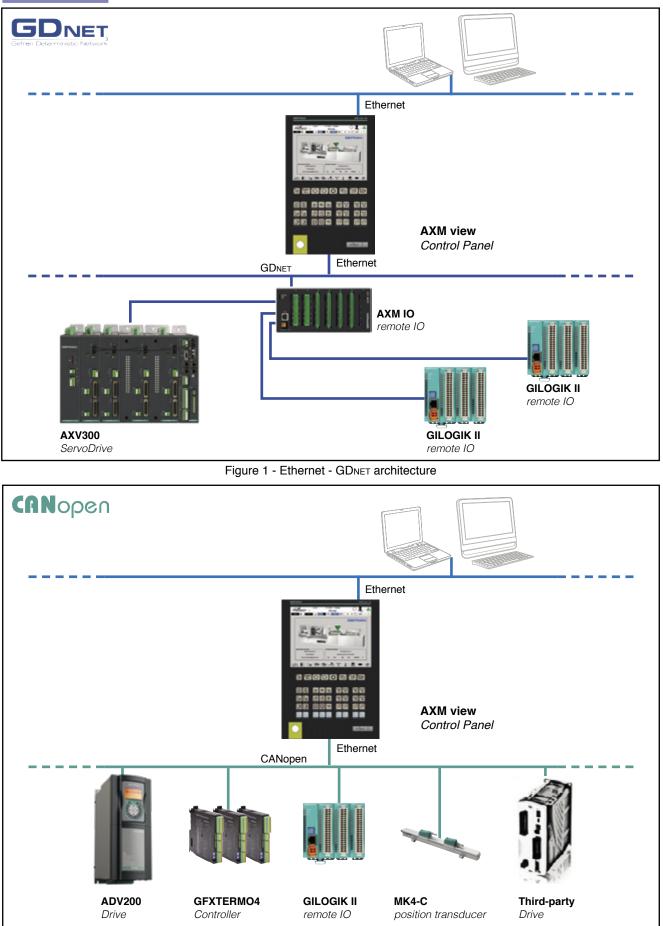


Figure 2- Ethernet - CAN (CANopen) architecture

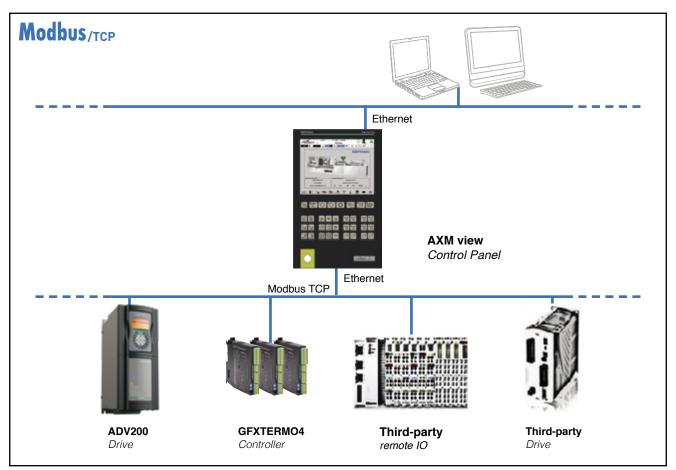


Figure 3 - Ethernet – Modbus TCP architecture

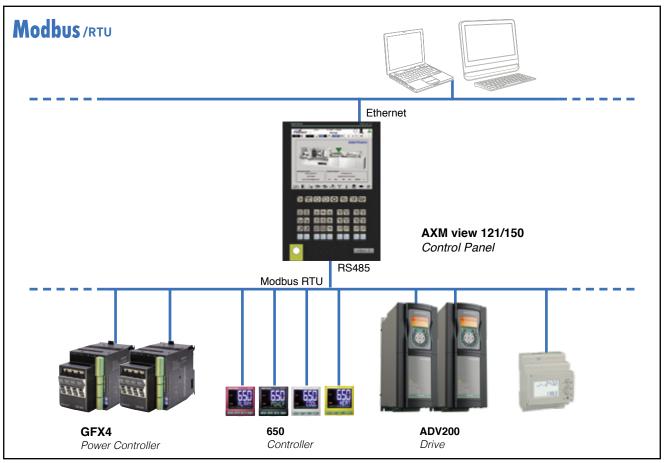


Figure 4 - Example of Ethernet - Modbus RTU (RS485) architecture

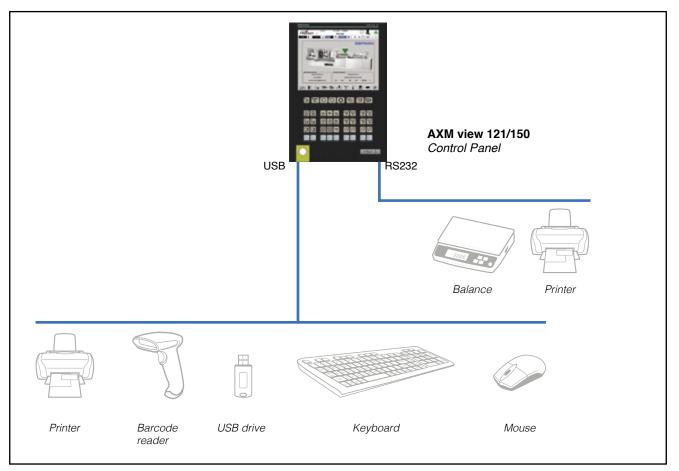


Figure 5 - Example with USB and RS232 ports

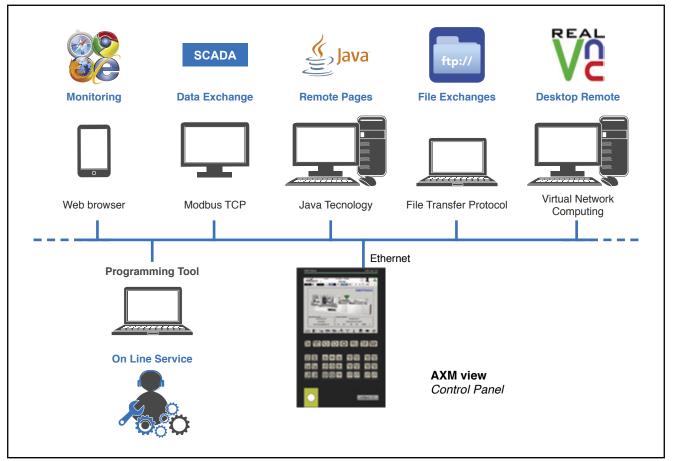


Figura 6 - Examples of remote services

# **Technical data**

		AXM view 104	AXM view 121	AXM view 150
	Operating voltage	24 VDC ±25%	L	
	Current draw (at 24 VDC)	600 mA max	900 mA max	850 mA max
POWER SUPPLY	Power dissipation	15 W max	22 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>		
	Ethernet port (ETH)	Number of channels: 2 max 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 (AXM view 121 and AXM view 150 models only)	Connector: DB9 M Velocità: 1.2kbit/s115kbit/s		
CONNECTIONS	RS-485 port (AXM view 121 and AXM view 150 models only)	Optically isolated Connector: DB9 M Speed: 9 kbit/s 19 kbit/s Terminations and polarization: internal, selectable with jumper		
	CAN port (AXM view 121 and AXM view 150 models only)	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: 500mA overload		
COMMUNICATION	Ethernet	FTP (File Transfer Protocol) Modbus TCP/IP Master/Slave GDNET Master		
PROTOCOLS	CAN	CANopen Master		
	Modbus	Modbus RTU Master/Slave		
	Size (diagonal)	10.4"	12.1"	15"
	Format	4:3		
	Pixel resolution	800 × 600	1	1024 x 768
	Screen area (L x H)	211.2 × 158.4 mm	246.0 x 187.5 mm	304.1 x 228.1 mm
	Colors	256 K / 18 bit		
DISPLAY	Luminosity	400 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	500 cd/m <sup>2</sup>
	Contrast	500:1	1500:1	1500:1
	Backlighting	White LEDs life 30,000 hours @ 25 °C	White LEDs life 50,000 hours @ 25 °C	White LEDs life 50,000 hours @ 25 °C
	Visual angle	Horizontal: 70° - 70° Vertical: 50° - 60°	Horizontal: 89° - 89° Vertical: 89° - 89°	Horizontal: 70° - 85° Vertical: 70° - 85°
CONFIGURATION ELEMENTS	Access to software procedures	16-position rotary switch		
	Touch screen calibration	Via software on product		
CONTROL ELEMENTS	Touch screen	4-wire resistive tech	nology	

		AXM view 104	AXM view 121	AXM view 150	
	Keys	35 N.O.	44 N.O.	44 N.O.	
	External keys	4 N.O.			
	Customizable keys symbols	NO	9 with external label	9 with external label	
KEYBOARD	LEDs green	1			
REIBOARD	LEDs yellow	2			
	LEDs red	4			
	Electromechanical buttons	NO	3 prepared holes Ø 22 mm	3 prepared holes Ø 22 mm	
	Emergency button	1 Ø 22 mm (NON INCLUSO)			
VIEWING ELEMENTS      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					
MICDODDOCEGEOD		ATOM E640 1 GHz ATOM E660, 1.3 GH			
	System	512 MB, DRAM type DDR II			
MEMORY	Mass	2 GB Flash memory			
	Mass extension	SD Card Slot *			
	Operating temperature	0 +55 °C (as per IEC 68-2-14)			
	Storage temperature	-20 +70 °C (as per IEC 68-2-14)			
AMBIENT CONDITIONS	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			
ASSEMBLY		Built-in, in control boards or panels			
PROTECTION LEVEL		IP 65 on front panel (as per IEC 68-2-3)			
WEIGHT		2.100 kg	2.700 kg	3.500 kg	
CE STANDARDS      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

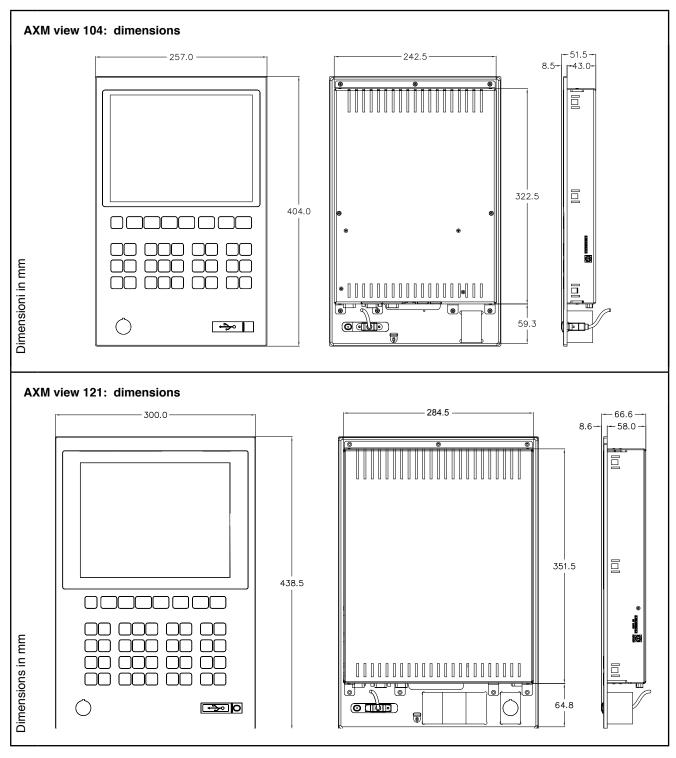


Figure 8 - Dimensions AXM view 104 / 121

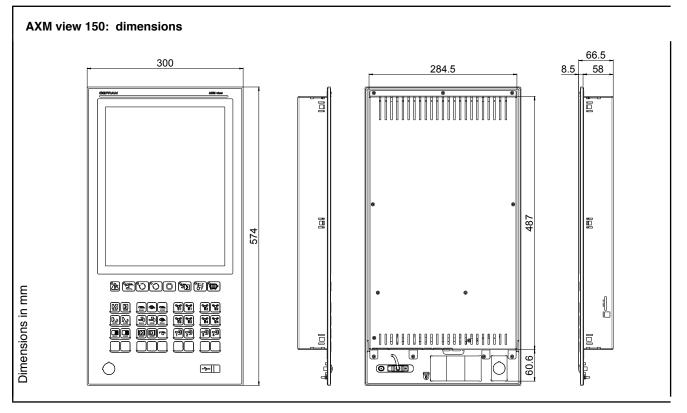


Figure 9 - Dimensions AXM view 150

#### Order codes

#### AXM view 104 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
F071521	AXM view 104-35-20-E1- 00-00	communication peripherals 2 x Ethernet (Modbus TCP, GDNet), 2 x USB, 1 x keyboard eKMxx

#### AXM view 121 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
F071425	AXM view 121-44-30-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)

#### AXM view 150 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
F074414	AXM view 150-44-30-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)

#### Accessories

Code	Model Number	Description
F072458	KIT_INSTA_AXM view	Installation kit (fastening blocks + ferrite + power supply connector)
F057777	SD_CARD1G	SD Card 1GB
F057679	USB_PEN1G	1 GB USB key
F028595	R-CAVETHX6	Cable ETHERNET cross L. = 6 m



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