



Main applications

- Machine control:
 - Plastics
 - Packing
 - Wood
 - Metalworking

Main features

- 10,4" display
- Resolution 800x600 (SVGA)
- Integrated keyboard
- Field bus connectivity (CANOpen, Modbus RTU, Modbus TCP)
- Ethernet 10/100 BaseT
- Fan less
- Solid State Disk (DOM)
- Programmable with:
 - Gefran Automation Builder
 - VedoWin
 - Scada

PROFILE

The GF_VEDO line of operator terminals offers a compact and economic system for machine control.

Machine cycle control [IEC1131 based Soft PLC] and graphic page display [SCADA] are integrated in a single product.

This integration provides a variety of quick and economical automation solutions.

The GF_VEDO ML 104CK is offered with a 10.4" TFT active matrix display, with resolution of 800x600 pixel (SVGA).

The processor belongs to the GEODE family (32 bit), with a minimum of 128 MB to a maximum of 512 MB of RAM, depending on the operating system installed.

A extremely important feature is the complete absence of moving parts: a Compact Flash mass memory of various capacity [1GB...2GB] is used, offering maximum safety even in the presence of strong vibration.

A wide range of peripheral I/O is available:

- 1x RS485 optoisolated
- 2xEthernet 10/100 Base-T
- 4xUSB 2.0 (Host)
- Fieldbuses keyboard

- Auto-ON
 - 1xRS232
 - PS/2 Mouse and Keyboard
 - 1 x Fieldbus [optional] (CAN Layer 2)
- The product can be ordered with different operating systems already installed, such as:

- VxWorks
- Windows XP Embedded

This solution allows the creation of various automation architectures (including real time) and the use of software from other suppliers.

The GF_VEDO family includes products with display from 3.5" to 15", with or without integrated machine keyboards. In addition "ready-to-use" application are available, such as:

- GF_PACK_EXTRUSION extrusion
- GF_PACK_INJECTION injection

TECHNICAL DATA

DISPLAY

Type:	TFT Color
No. colors:	262.144
Size:	10.4"
Resolution:	800x600 (SVGA)
Luminosity:	230 cd/m2
Contrast:	500:1

INTEGRATED KEYBOARD

Function keys:	22
Page navigation keys:	32

PROCESSOR

Type:	AMD GEODE LX900
Frequency:	600 MHZ
Core:	x86

MEMORY

System memory (DRAM):	128-512 MB
Mass memory (Compact Flash):	1GB-2GB

OS SUPPORTED

VxWorks
Windows XP Embedded

GENERAL DATA

Front dimensions: 266x289mm
 Drilling dimensions: 258x281mm
 Weight: 1,9 Kg
 Front panel protection: IP65
 Working temperature: 0...50°C
 Storage temperature: -20°C...70°C
 Humidity: 5...95% non-condensing (IEC 68-2-3)
 Power supply: 24Vdc ±25%,20W
 Certifications: CE, UL (awaiting certification)

Name: RS485
 Connector: RJ10 4p4c
 Optically isolated: YES
 Baud rate: 9,6...115 kBaud

Name: USB1
 Type: 2xUSB 2.0 HOST
 Connector: Type A (500mA)

Name: USB2
 Type: 2xUSB 2.0 HOST
 Connector: Type A (500mA)

Name: KEY & LED
 Function: Fieldbuses keyboard
 Connector: RJ45 (without LEDs)
 Optically isolated: NO

Name: PC-KEY
 Connector: standard PS2 miniDIN 6 pin (green)

Name: FIELDBUS [optional]
 Function: CAN layer 2
 Connector: D-Sub 9 pin male

Name: RS232
 Connector: D-Sub 9-pin male
 Optoisolata: NO
 Baud rate: 9,6...115 kBaud

Name: AUX
 Function: future expansions

PERIPHERAL I/O

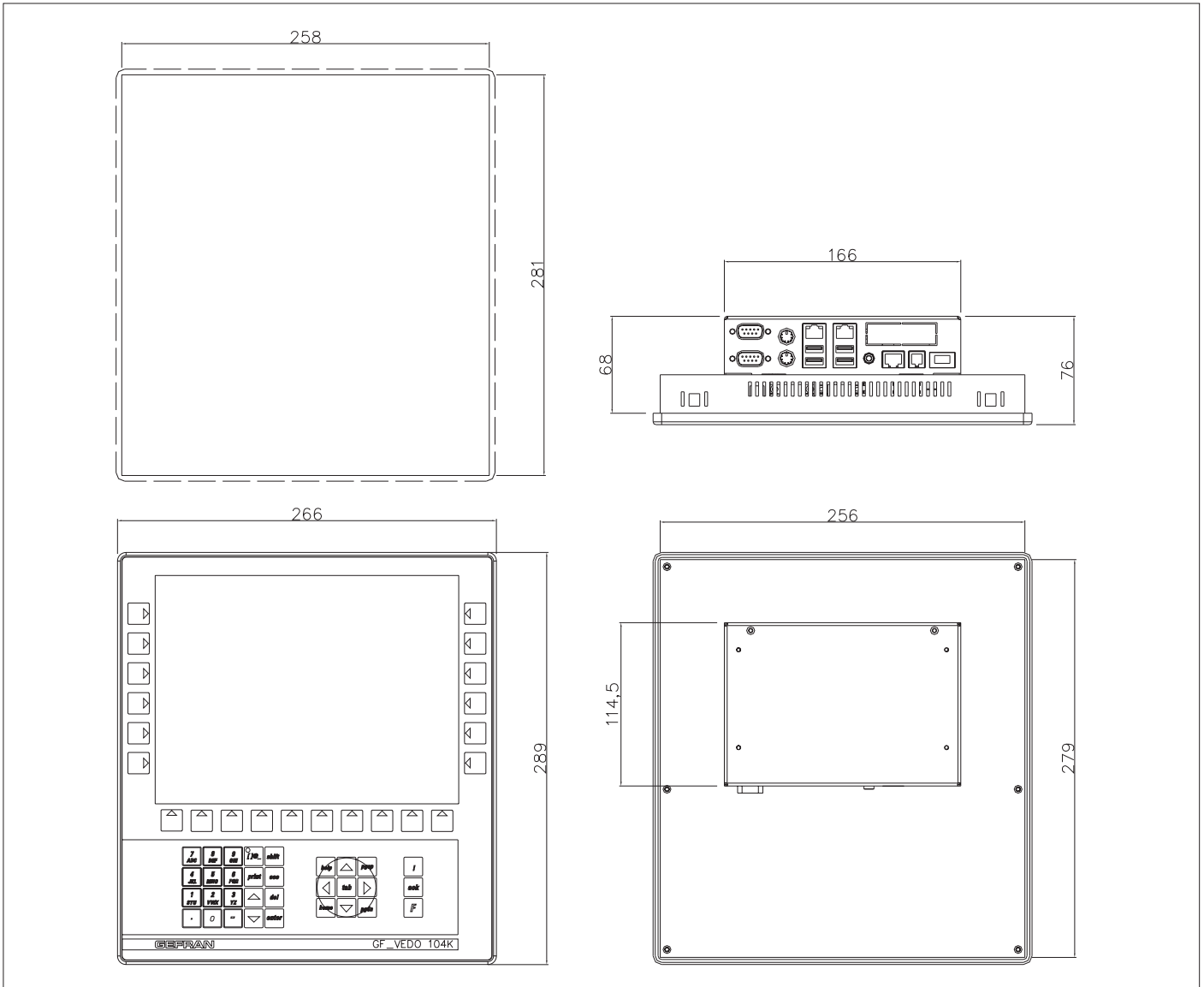
Name: ETH1
 Type: Ethernet 10/100 Base-T
 Connector: RJ45 with LEDs

Name: AUTOSTART
 Function: Auto-ON
 Connector: 3-pin female, screw-type
 24Vdc ±25%, 100mA

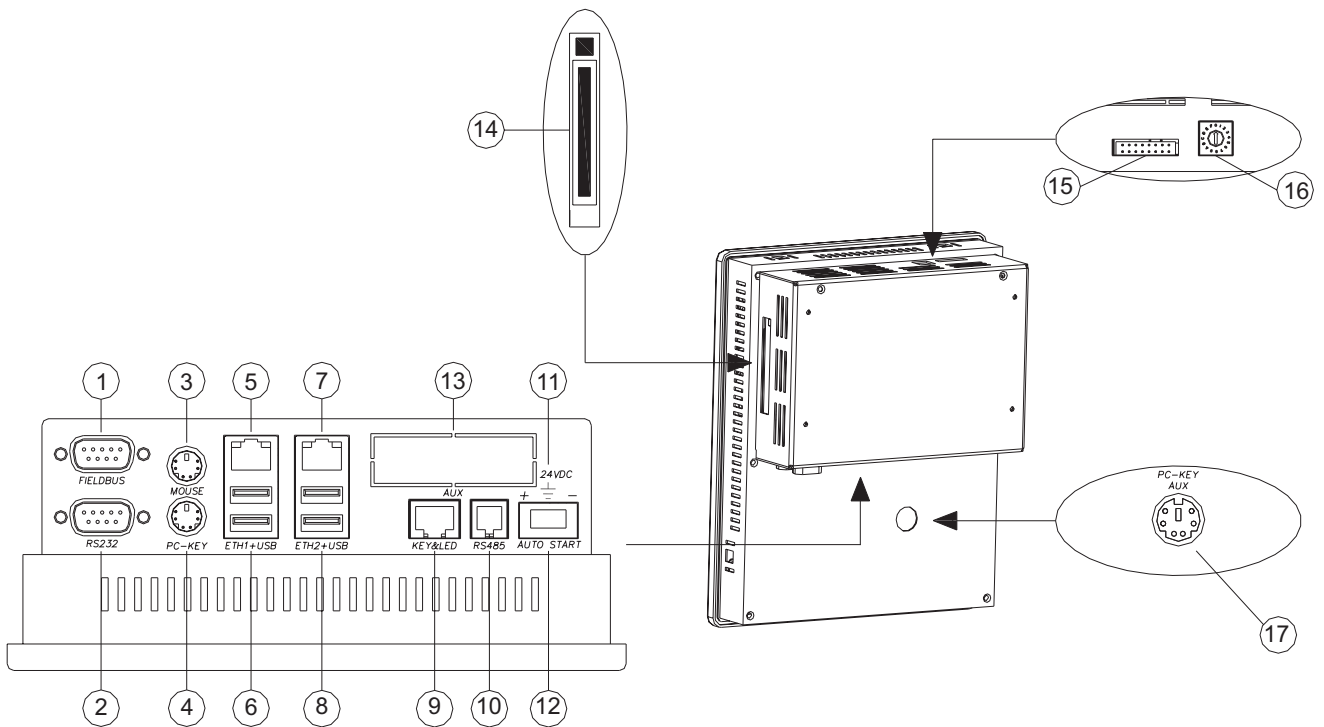
Name: ETH2
 Type: Ethernet 10/100 Base-T
 Connector: RJ45 with LEDs

Name: MOUSE
 Connector: standard PS2 miniDIN 6 pin (violet)

DIMENSIONS AND CUT OUT

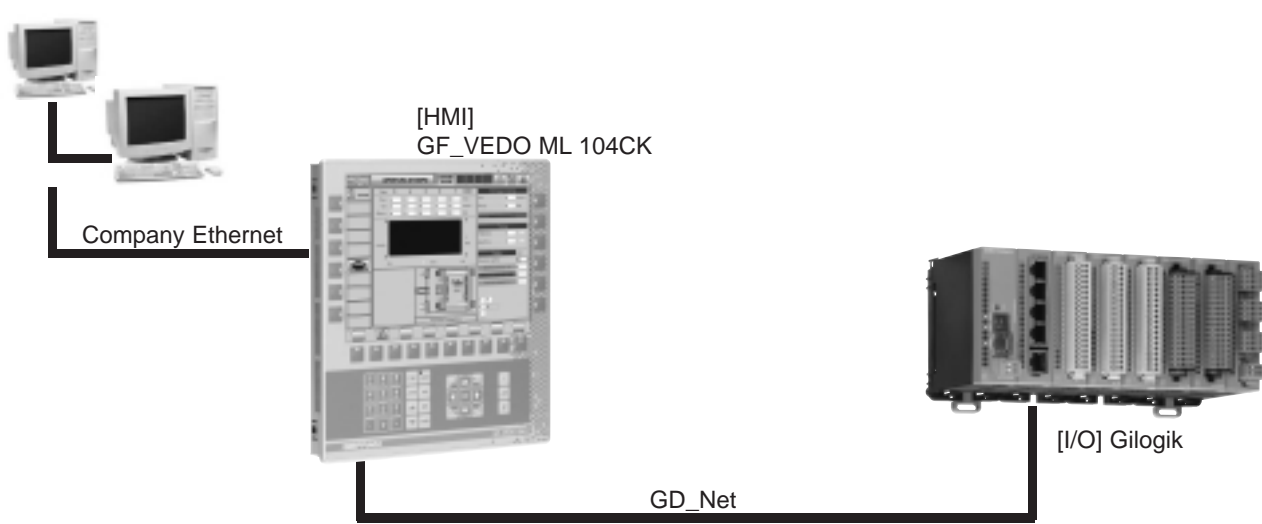
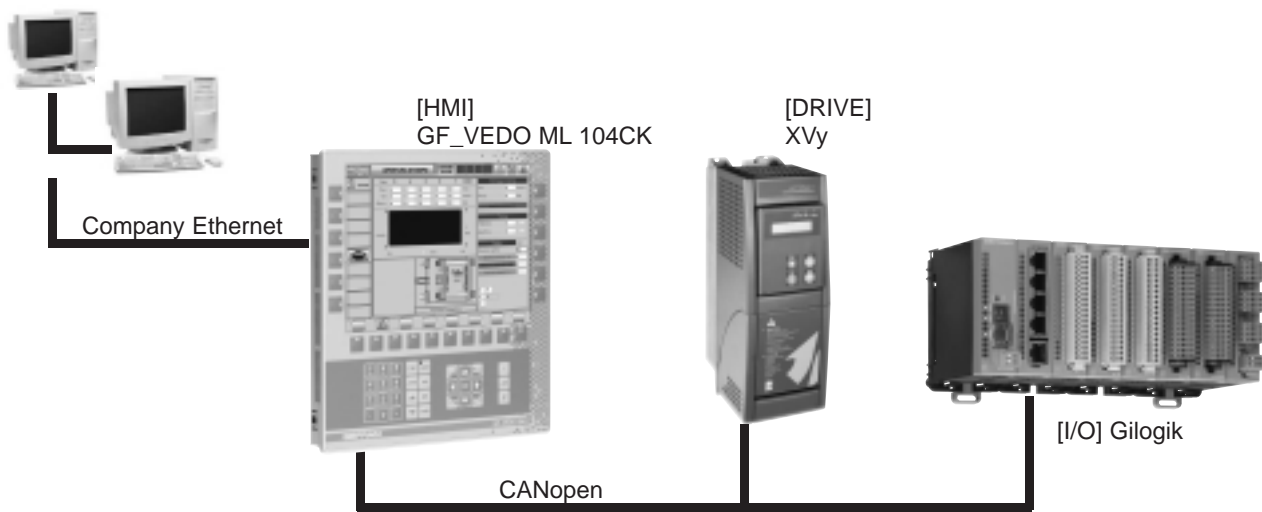
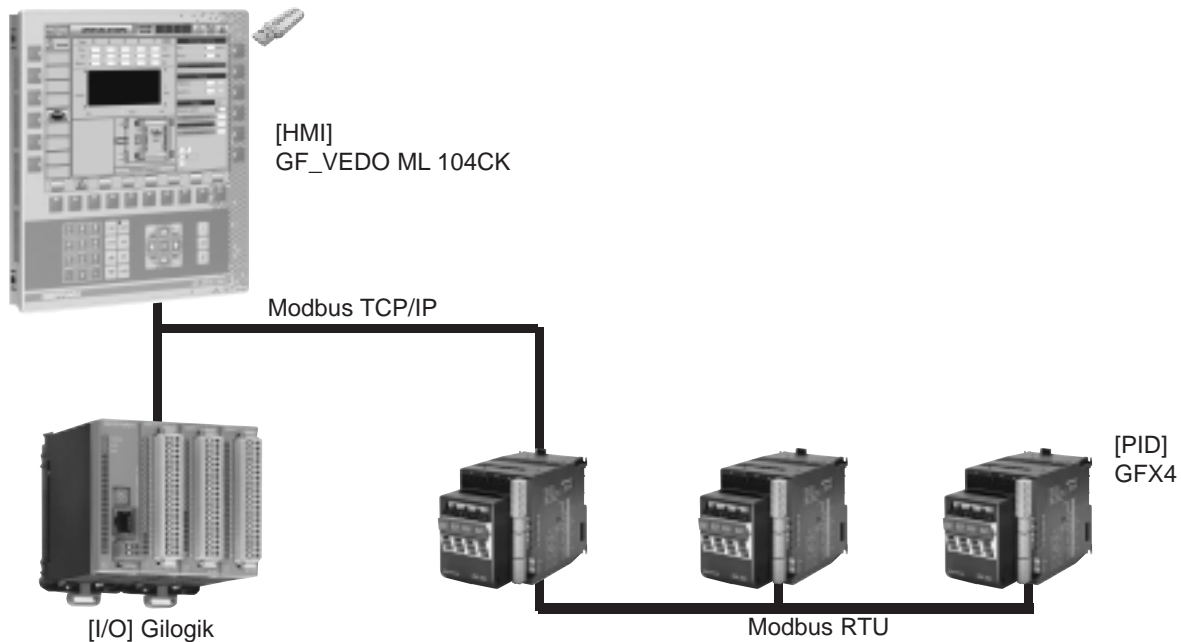


CONNECTIONS



No	Name	Description
1	FIELD BUS	[Optional] -CAN layer 2
2	RS232	Serial RS-232
3	MOUSE	PS/2 Mouse (green)
4	PC-KEY	PS/2 keyboard (violet)
5	ETH1	Ethernet 10/100 Base-T
6	USB	USB 2.0 Host (500mA)
7	ETH2	Ethernet 10/100 Base-T
8	USB	USB 2.0 Host (500mA)
9	KEY & LED	Fieldbuses keyboard
10	RS485	RS-485 optically-isolated serial
11	AUTO-START	Auto-on
12	24VDC	Power supply
13	AUX	Reserved for future uses
14	CF	Compact Flash
15	BATTERY	Battery jumper
16	ROTARY	Rotary configuration selector
17	PC-KEY	Auxiliary PS/2 keyboard

CONNECTION EXAMPLES



ORDER CODE

GF_VEDO ML 104CK 00 00 00 00

MODEL	
GF_VEDO ML 104CK	104CK
OPERATING SYSTEMS	
VxWorks CF: 1GB RAM: 128MB	VW0
VxWorks CF: 1GB RAM: 256MB	VW1
WinXP Embedded CF: 1GB RAM: 256MB	XE0
WinXP Embedded CF: 2GB RAM: 512MB	XE1
EXPANSION 1	
None	00
CANopen + RS232+ Autostart	C1
EXPANSION 2	
None	00
RS232 + Autostart	S1 (*)
LEXAN	
Gefran	G
Neutro	N

(*) only in absence of the expansion1 (C1)

Please, contact GEFRAN sales people for the codes availability.

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice

ACCESSORIES

Keyboards	Fieldbuses keyboard to manage movements.....	TF32-104
	Keyboard to integrate electromechanical buttons.....	TE8-104
Supply	Stabilized supply 100....240Vac/24Vdc, 5A.....	GF_PS5
Software	Preloaded software package for complete management of injection presses.....	GF_PACK INJECTION
	Preloaded software package for complete management of extrusion lines.....	GF_PACK EXTRUSION
	Integrated programming environment.....	Gefran Automation Builder
	Software platform for SCADA applications.....	VedoWin



In conformity to ECC 2004/108/CE (EMC) and 2006/95/CE (LVD) with reference to: **EN 61131-2** (product) **EN 61010-1** (safety).



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