



### Main applications

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

### Main features

- 6.5" display
- Resolution 640x480 (VGA)
- 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 65CK is offered with a 6.5" TFT active matrix display, with resolution of 640x480 pixel (VGA).

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:	6.5"
Resolution:	640x480 (VGA)
Luminosity:	500 cd/m2
Contrast:	450:1

#### INTEGRATED KEYBOARD

Funktion keys:	15
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: 187x230mm  
 Drilling dimensions: 180x222mm  
 Weight: 1,3 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**

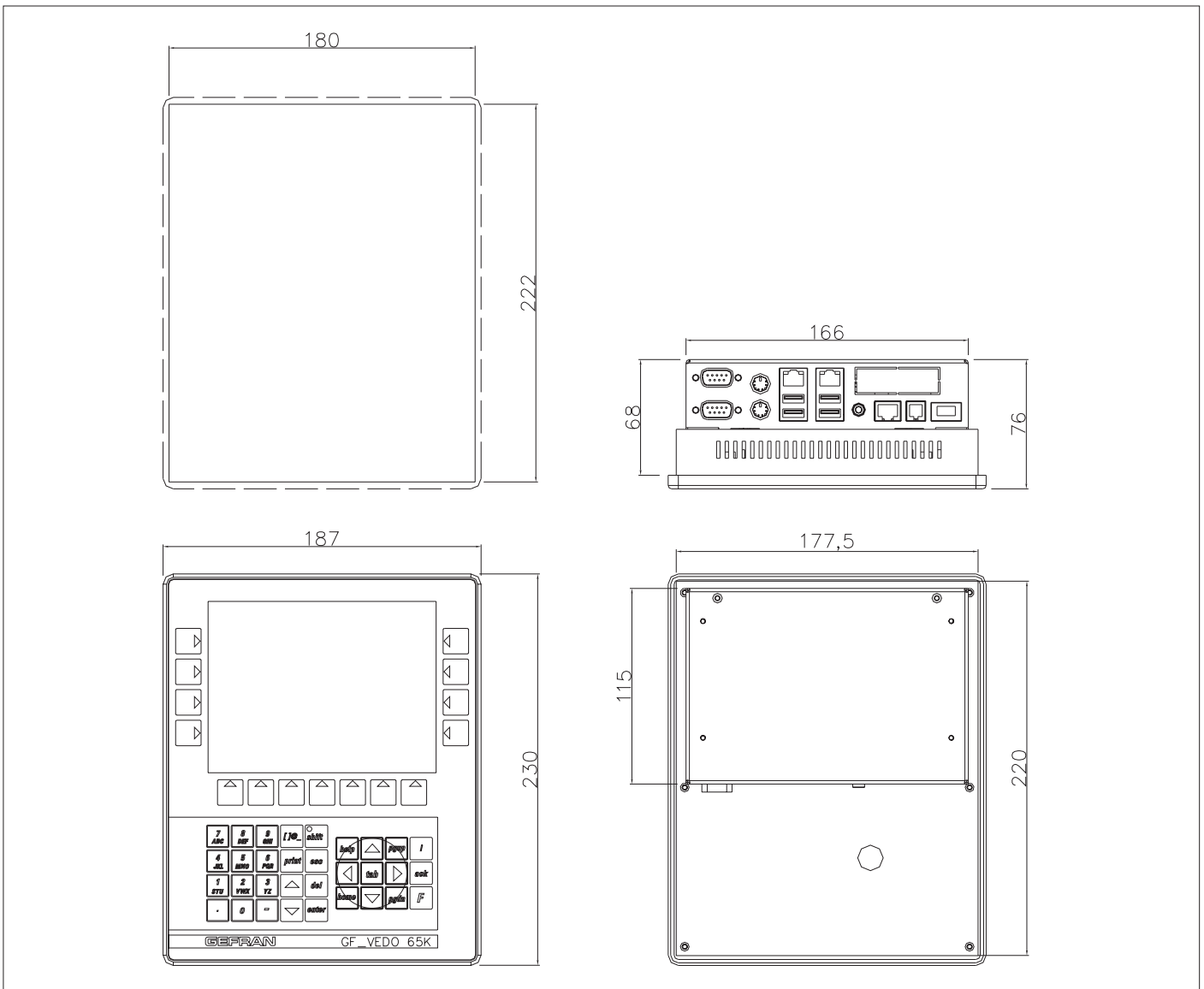
Name: ETH1  
 Type: Ethernet 10/100 Base-T  
 Connector: RJ45 with LEDs

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

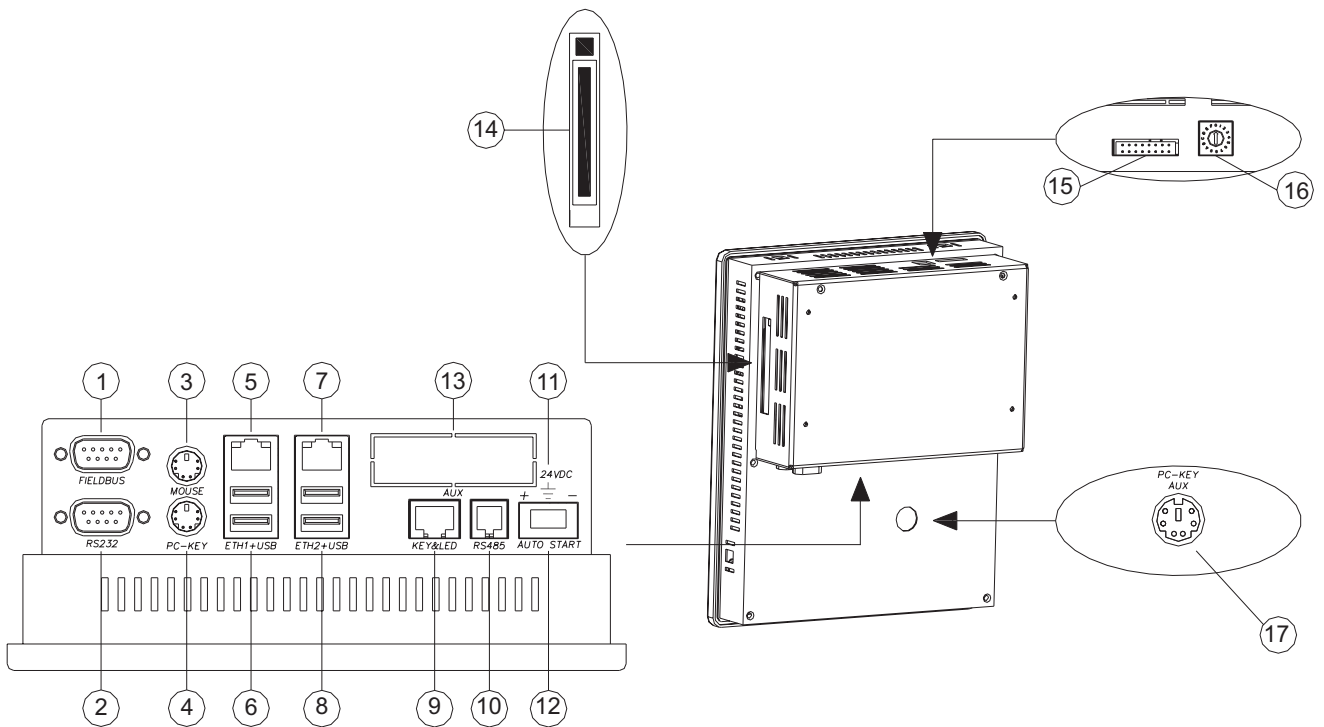
Name: ETH2  
 Type: Ethernet 10/100 Base-T  
 Connector: RJ45 with LEDs

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

**DIMENSIONS AND CUT OUT**

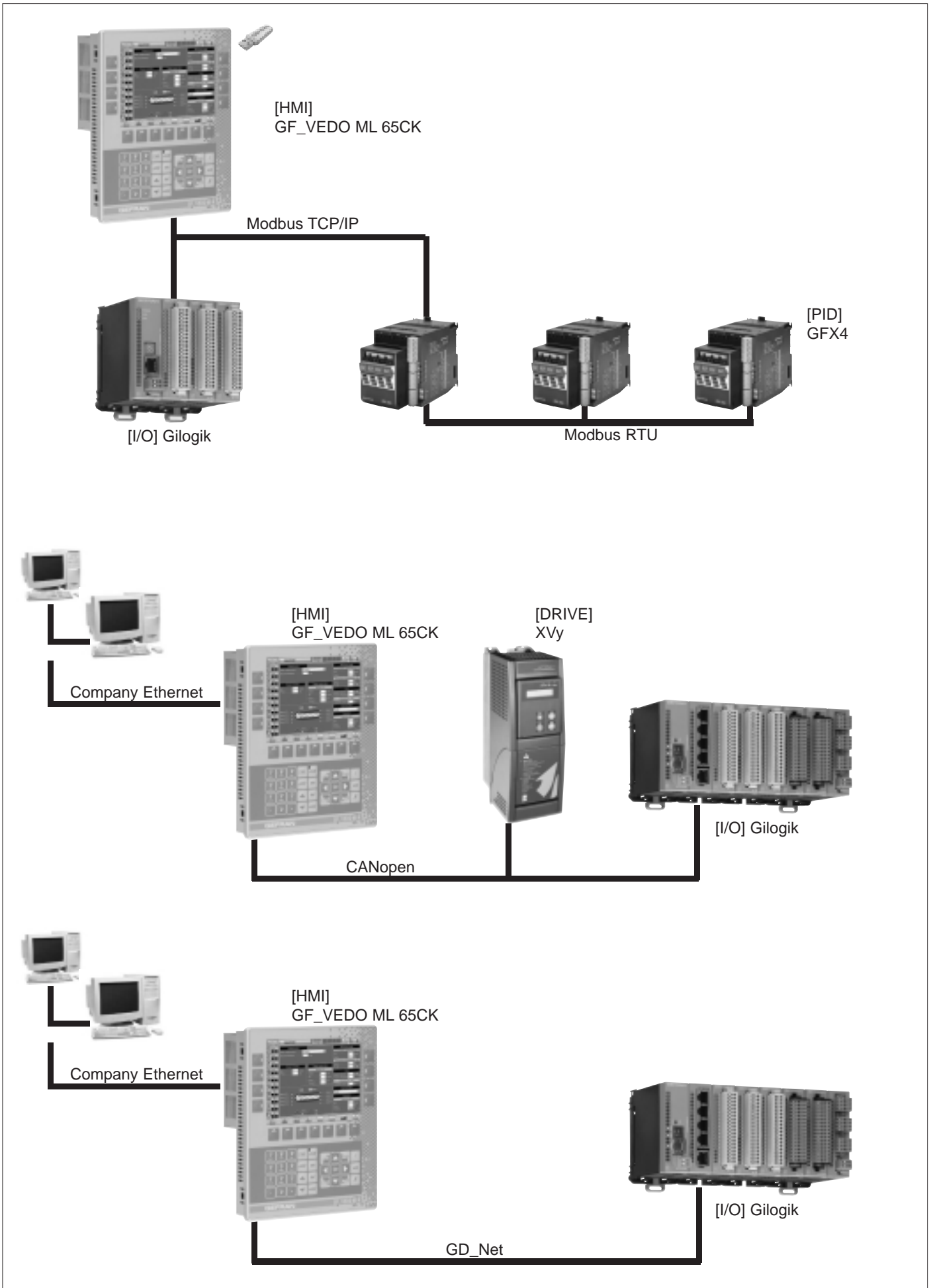


## CONNECTIONS



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 65CK 00 00 00 00

MODEL	
GF_VEDO ML 65CK	65CK
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**

<b>Keyboards</b>	Fieldbuses keyboard to manage movements.....	<b>TF32-65</b>
	Keyboard to integrate electromechanical buttons.....	<b>TE5-65</b>
<b>Supply</b>	Stabilized supply 100....240Vac/24Vdc, 5A.....	<b>GF_PS5</b>
<b>Software</b>	Preloaded software package for complete management of injection presses.....	<b>GF_PACK INJECTION</b>
	Preloaded software package for complete management of extrusion lines.....	<b>GF_PACK EXTRUSION</b>
	Integrated programming environment.....	<b>Gefran Automation Builder</b>
	Software platform for SCADA applications.....	<b>VedoWin</b>



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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