GEFRAN

e493xx

CPU MODULE   *eCPU400 SERIES*

e493xx

Main characteristics:

- Management of PLC and display
- Standard IEC 61131-3 programming: complete support of all languages
- Powered by rack back-plane
- No maintenance: fanless; no moving parts
- High data storage capacity: 2 GB solid state mass memory
- Basic model with DVI-D port, two USB ports and one Ethernet
- Fieldbus options: second Ethernet port for GDNet (Fast Ethernet) communication; CAN port for CANopen Master communication
- Serial options: one RS485 port and one RS232 port

Code	According to model (see order code)
Model Number	e493xx (see order code)
Description	CPU module to manage PLC and display. 1,3 GHz Intel Atom E660 processor
Position rack	In the first slot on the left, dedicated fixed position

PROFILE

The eCPU400 series model e493xx CPU module manages pages and the PLC. It installs in the first slot on the left of the rack. It is powered by the back-plane, which connects it to the I/O modules.
The front of the module has a standard DVI-D output and ports for connections to the operator interface, to the Ethernet, and to other devices and buses.
Available with ATOM E660 processor, frequency 1,3 GHz.

TECHNICAL DATA

POWER SUPPLY	Internal	via back-plane
	Power dissipation	15 W max
BACKUP BATTERY	Type	ML2032, rechargeable Li-Al 3 V 65 mAh, non-replaceable
	Life	10 years; 3 months without power supply
CONNECTIONS	Rack	Card-edge
	Video output	Connector: DVI-D Intel integrated 2D/3D graphic interface Resolution: settable via software (800×600 or 1024×768) Max. connection distance: 5 meters
	Ethernet (ETH) port	Number of channels: 2 max (1 optional) Connector: RJ45 Speed: 10 / 100 / 1000 Mbit/s Signals: green connection LED, yellow data LED
	RS-485 port (optional)	Optically isolated Connector: DB9 M Speed: 9,6 kbit/s … 19,2 kbit/s Termination: external
	USB port	Number of ports: 4 max (2 optional) Connector: type A Standard: USB 2.0 Protection: overload
	CAN port (optional)	Optically isolated Connector: DB9M Speed: 20, 50, 100, 125, 250, 500, 1000 kbit/s, default 500 kbit/s Termination: external
	RS-232 port (optional)	Connector: DB9 M Speed: 1.2 kbit/s … 115 kbit/s
COMMUNICATION PROTOCOLS	Ethernet	FTP (File Transfer Protocol) Modbus TCP/IP Master/Slave
	CAN	CANopen Master
	Modbus	Modbus RTU Master/Slave
CONFIGURATION ELEMENTS	Software procedure access	16-postion rotary selector
	PLC management	3-position selector *
DISPLAY ELEMENTS	Diagnostics	LED PW (yellow): power ON LED RN (green): PLC program status LED E1 (red): error bus I/O local LED E2 (red): Watchdog HW status LED E3 (red): Watchdog SW status LED E4 (red): PLC program status
MICROPROCESSOR	Type and frequency	ATOM E660, 1.3 GHz
MEMORY	System	512 MB, DRAM type DDRII
	Mass	2 GB Flash memory
	Mass memory extension	Slot SD Card **
AMBIENT CONDITIONS	Operating temperature	0 ... +50 °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)
ASSEMBLY		On rack, with snap hooks
PROTECTION LEVEL		IP20
WEIGHT		0,5 kg
CE STANDARDS	EMC (electromagnetic compatibility)	Conforms to Directive 2004/108/CE EMC Emission: EN 61000-6-4 EMC Immunity: EN 61131-2, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11
	LV (low voltage)	Conforms to Directive 2006/95/CE Safety LVD: EN 61010-1

* Currently not managed.

** SD Card not included, available as accessory.

ORDER CODES

The following codes refer to single CPU modules.

See the system documentation for the complete system.

Code	Model Number	Description
F057766	e49300	eCPU400 series CPU module to manage pages and PLC. Model with Intel Atom E660 processor (1.3 GHz), 2 GB Flash memory and 512 MB RAM. DVI-D port for connection to operator panel, Ethernet port and 2 USB ports.
F057767	e49301	eCPU400 series CPU module to manage pages and PLC. Model with Intel Atom E660 processor (1.3 GHz), 2 GB Flash memory and 512 MB RAM. DVI-D port for connection to operator panel, Ethernet port and 2 USB ports. 2 serial ports type RS485 and RS232.
F057768	e49302	eCPU400 series CPU module to manage pages and PLC. Model with Intel Atom E660 processor (1.3 GHz), 2 GB Flash memory and 512 MB RAM. DVI-D port for connection to operator panel, Ethernet port and 2 USB ports. 1 CAN port for CANopen communication.
F057769	e49303	eCPU400 series CPU module to manage pages and PLC. Model with Intel Atom E660 processor (1.3 GHz), 2 GB Flash memory and 512 MB RAM. DVI-D port for connection to operator panel, Ethernet port and 2 USB ports. 2 serial ports type RS485 and RS232. 1 CAN port for CANopen communication.
F057770	e49304	eCPU400 series CPU module to manage pages and PLC. Model with Intel Atom E660 processor (1.3 GHz), 2 GB Flash memory and 512 MB RAM. DVI-D port for connection to operator panel, 2 Ethernet ports and 4 USB ports.
F057771	e49305	eCPU400 series CPU module to manage pages and PLC. Model with Intel Atom E660 processor (1.3 GHz), 2 GB Flash memory and 512 MB RAM. DVI-D port for connection to operator panel, 2 Ethernet ports and 4 USB ports. 2 serial ports type RS485 and RS232.
F057772	e49306	eCPU400 series CPU module to manage pages and PLC. Model with Intel Atom E660 processor (1.3 GHz), 2 GB Flash memory and 512 MB RAM. DVI-D port for connection to operator panel, 2 Ethernet ports and 4 USB ports. 1 CAN port for CANopen communication.
F057773	e49307	eCPU400 series CPU module to manage pages and PLC. Model with Intel Atom E660 processor (1.3 GHz), 2 GB Flash memory and 512 MB RAM. DVI-D port for connection to operator panel, 2 Ethernet ports and 4 USB ports. 2 serial ports type RS485 and RS232. 1 CAN port for CANopen communication.

ACCESSORIES

Code	Model Number	Description
F057777	SD_CARD_1GB	SD Card
F057674	CAV_DVI18	1.8 meter DVI-D cable
F057675	CAV_DVI50	5 meter DVI-D cable
F057676	CAV_USB_AB18	1.8 meter USB 2.0 cable, type A - type B connectors
F057677	CAV_USB_AB50	5 meter USB 2.0 cable, type A - type B connectors
F057679	USB_PEN1G	USB 1GB key