

Technical data sheet

Microprocessor module MPM.730.41



- ARM A9 i.MX28 450 MHz Processor
- 1 x RS232, 1 x RS485, 2 x CAN
- 1 x Ethernet, 1 x Micro-SD-Card
- LED status indication
- Integrated top hat rail bus system
- Pluggable screw type terminals
- CODESYS programming

System description

The modular control system PLM 730 consists of CAN field bus components, which are designed for use in decentralised I/O sections of control systems. All field bus components are designed for mounting in a top hat rail bus system with 22,5mm spacing. CAN bus and power supply can be routed through the rail bus using back side interconnectors. The extensive range of over 100 different modules offers solutions for conventional I/Os and industrial standard bus systems.

Due to their modular design the components are easily upgradable. Most modules are graded in steps of 2, 4 or 8 channels. The integrated top head rail bus system offers a service friendly and time saving wiring.

Article

Model	Article no.
Microprocessor module	MPM.730.41
Accessoires	
Battery CR 2032	BTE.002.18
Top hat rail bus interconnector	AKE.307.05
Top hat rail bus connector, left side	AKE.309.05
Top hat rail bus connector, right side	AKE.308.05

Electrical data

CPU and memory	ARM A9 i.MX28 450 Mhz
	128 MB RAM, 4 GB flash, 64 kB ret.
	1 x Micro-SD-Card Slot (internally)
Interfaces	2 x CAN (CANopen, master)
	1 x Ethernet
	1 x RS232
	1 x RS485
LED indicators	LED indications for 24 VDC, run and status

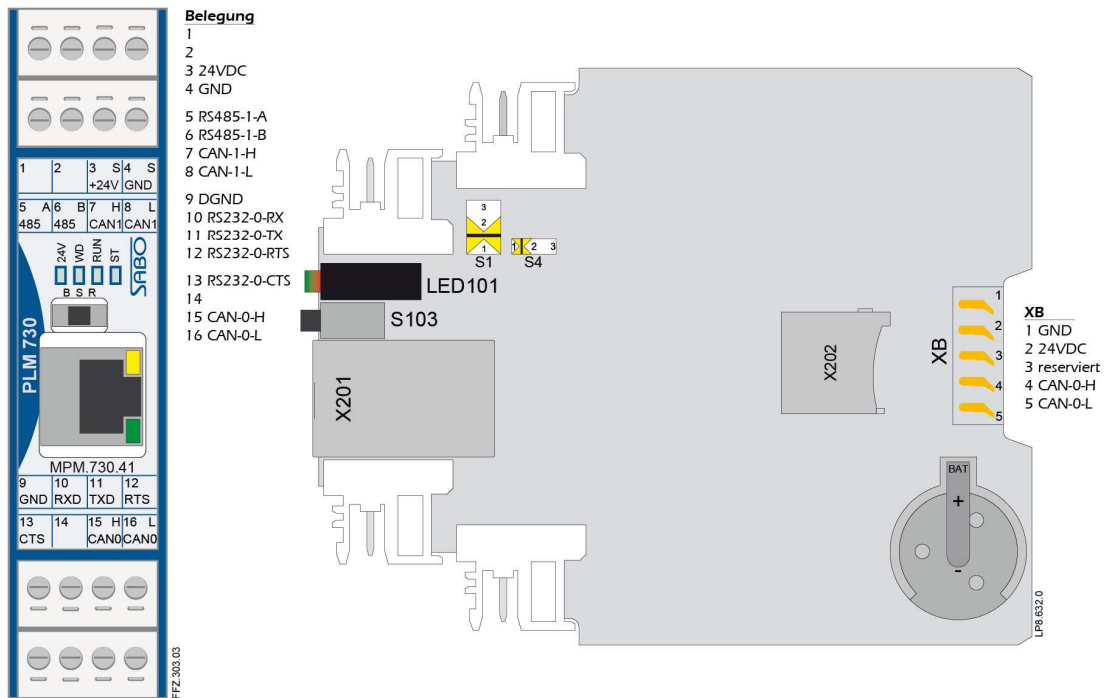
Realtime clock with date	Data preservation battery CR2032
	Data preservation 2h w/o battery
SPS programming	IEC 61131-3 / CODESYS
Power supply	24 VDC \pm 10 %
Power consumption	Basic device typical 150 mA
	Basic device max. 300 mA
Top hat rail bus connector	Contact load max. 1 A, 24 W
	30 plug in cycles

Mechanical data

Dimensions	width x height x depth (mm):
	22,5 x 100 x 115
Weight	approx. 140 g
Case	Plastic case with ventilation slots, top hat rail bus system
Connectors	Pluggable screw type terminals

Protection category	IP 20
Climatic conditions	Storage temperature -10...+70 °C
	Surrounding arear temperature
	-5...+50 °C
	Atmospheric moisture up to 85 %
	without condensation









Layout






Configuration

S1 Slide switch RS485-1 termination		S4 Slide switch CAN-1 termination	
	RS485-1 No termination		CAN-1 No termination
	RS485-1 Termination with 150 Ohm + 2 x 300 ohms		CAN-1 Termination with 120 ohms

Indicating and control elements

LED101 System LEDs		
Symbol	Pattern	Description
24V		24 VDC supply available
WD		LED inoperative
RUN		PLC online, CODESYS boot project in RUN status
		PLC online, CODESYS boot project in STOP status
		Update in progress
		Update error
		Update ok
ST		Illuminated if slide switch S103 is in STOP or RUN position

S103 Slide switch CPU status		
	RUN	After startup, CODESYS loads the boot project. If no boot project is installed, device enters STOP.
	STOP	After startup, CODESYS enters STOP. The boot project won't start. Additionally the retain variables will be initialized upon next startup in RUN position.*
	BOOT	Device starts with bootloader. Usable only for special purposes with special software.

Informations

Power supply

Connect a new power supply line every 10 modules.

Configuration

Warning! Please note the internal configuration, the firmware version and mounting details before module installation.

Mounting

Do not plug or unplug the module when a voltage is supplied, because of possible module damage or data loss.

CAN bus termination

The CAN bus has to be terminated at the beginning (controller or first field bus module) and at the end of the bus line (last field bus module).

Installation advices

Pay attention to the separate informations about EMC compatible hardware installation in the systems manual of the SABO Elektronik GmbH. downloadable via <http://www.sabo.de>

* depends on the software version