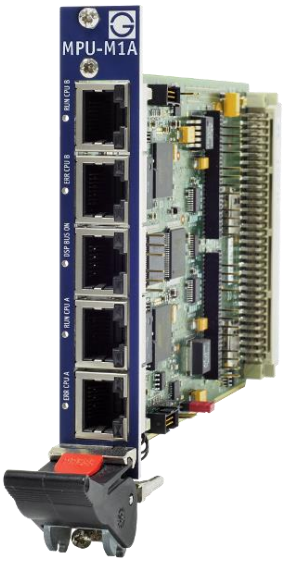
MPU-M1A

BlueLine²

industrial quality redundant central processor card, SIL3 / PL e certified



SIL3 / PLe

The MPU-M1A card is a multi-processor safety CPU card. The internally redundant design with two microprocessors has a hardware fault tolerance of 1 (HFT = 1) and is certified for safety and complex control functions, up to SIL3.

Software features

- SIL3 Ethernet communication (STP), for data exchange between independent safety systems via Ethernet
- serial Modbus RTU communication
- open communication via Ethernet UDP and Open Modbus TCP
- online hardware & software diagnostics

Technical data

- dual redundant 32-Bit processor system, 400MHz, based on newest embedded chip generation
- redundant 64MByte SDRAM
- redundant 256MByte Flash
- redundant 100Base-T Ethernet
- STP: safety related SIL3 Ethernet protocol
- OPEN MODBUS TCP, RTU MODBUS

- bool, integer and float operation
- digital and analog signal processing
- more than 100 SIL3-certified software function blocks

- SIL3-certified processor card
- internal hardware fault tolerance HFT = 1
- high diagnostic coverage (DC >99%)
- intelligent Watchdog functions
- program flow control
- temperature and voltage monitoring

- no active fan
- hot replaceable

- dimensions: 4TE, 3HE, 175mm (WxHxD)

- operating temperature range: -20 ... 65°C
- relative humidity: 10 ... 90 %, non-condensing
- shelf life: unlimited

- for use of the card in BASIC /C ST or BASIC /M ST systems the height of the front plate change to 4 HE.

applied standards

IEC 61508, EN ISO 13849, IEC 62061, IEC 61511, IEC 61131-2, EN 50178, EN 50155, EN 50156, IEC 61326, EN 54, EN 50130, EN 298, EN 61373, NFPA 72

DATASHEET