

PM 904F

Freelance hardware selector



This CPU module is the high-end base unit of the Freelance AC 900F controller family. It typically supports up to 1500 I/Os. 4 Ethernet interfaces, 800 MHz CPU clock, 48 MB Controller Memory: 16 MB battery buffered SRAM, 32 MB DRAM. 4 slots for assembling Communication Interface Module.

The operating system can be loaded during software installation. Needs an external 24 V DC power supply. Software version 2019 or higher is mandatory. Display Unit TD 951F and Battery TA 951F are not included.

Features and benefits

- More connectivity with serial ports and Ethernet ports
- Built-in SD card support
- New Ethernet-based protocols – Modbus TCP and IEC 60870-5-104
- G3 compliant as standard
- Built-in power supply
- Optional LCD providing enhanced security through controller lock
- Optional redundancy

| General info | |
|--------------------------------------|-----------------|
| Article number | 3BDH001002R0001 |
| Life cycle status | Active |
| Redundancy | Yes |
| Clock Frequency | 800 MHz |
| Performance, 1000 boolean operations | 0.12 ms |
| Memory | 48 MB |
| RAM available for application | 16 MB |

Detailed data

| | |
|---------------------------------|--|
| Processor type | PowerQUICC II Pro |
| Switch over time in red. conf. | 500 ms |
| No. of tasks per controller | 9 |
| Power supply | 24 V DC |
| Power consumption +24 V typ/max | 24 W / 30 W |
| Power dissipation | 18 W |
| Built-in back-up battery | Lithium battery (TA 951F) |
| Clock synchronization | yes |
| Ethernet channels | 4 |
| Ethernet interface | Ethernet (IEEE 802.3), 100/10 Mbit/s, RJ-45, female (8-pole) |
| RS-232C interface | 3 (2 general, 1 for service tool) |

Environment and certification

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|--------------------------|-------------------------------------|
| Temperature, Operating | -20°C ... +70°C |
| Temperature, Storage | -40 ... + 85°C |
| Temperature changes | 3K/min at -20°C ... +70°C |
| Corrosion protection | G3 compliant acc. ISA 71.04 |
| Relative humidity | max. 93%, non-condensing |
| Vibration | 2 g, 2 Hz ... 150 Hz |
| Protection class | IP20 |
| Altitude | < 2000 m |
| Emission & Immunity | EN 61000-6-4, EN 61000-6-2 |
| Environmental conditions | Industrial |
| CE Mark | yes |
| Electrical Safety | IEC/EN 61010-1, IEC/EN 61010-2-201 |
| Hazardous location | cULus Class 1 Div 2 (pending) |
| RoHS compliance | Directive 2011/65/EU, (EU) 2015/863 |
| WEEE compliance | Directive 2012/19/EU |

Dimensions

| | |
|-------------------------|--------|
| Width | 285 mm |
| Height | 152 mm |
| Depth | 95 mm |
| Weight (including base) | 1.1 kg |

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