

PM 902F

Freelance hardware selector



This CPU module is the medium base unit of the Freelance AC 900F controller family. It typically supports up to 1500 I/O and 8 MB battery buffered SRAM. 4 Ethernet interfaces, 800 MHz CPU clock, 24 MB Controller Memory, 8 MB battery buffered SRAM, and 16 MB DRAM. 2 slots for assembling Communication Interface Modules.

The operating system can be loaded during software installation. Needs an external 24 V DC power supply. Software version 2013 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

General info	
Article number	3BDH001000R0001
Life cycle status	Active
Redundancy	Yes
Clock Frequency	800 MHz
Performance, 1000 boolean operations	0.12 ms
Memory	24 MB
RAM available for application	8 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

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
RoHS compliance	Directive 2011/65/EU, (EU) 2015/863
WEEE compliance	Directive 2012/19/EU

Dimensions

Width	227 mm
Height	152 mm
Depth	95 mm
Weight (including base)	1.1 kg

—
solutions.abb/freelance
solutions.abb/controlsystems

—
We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document.

We reserve all rights to this document and the items and images it contains. The reproduction, disclosure to third parties or the use of the content of this document – including parts thereof – are prohibited without ABB's prior written permission.

Copyright© 2025 ABB All rights reserved