MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

ABB

PM571-ETH

ETHERNET PROCESSOR MODULE

Used with the applicable AC500 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: ABB AC500 Technical Catalog 2CDC125002B0207

Scalable automation system AC500

Details/Type:	PM571	PM571-ETH	PM581	PM581-ETH	PM581-ARC
Supply voltage	24 V DC		24 V DC		
Program memory Flash EPROM and RAM [kB]	64		256		
Integrated data memory [kB]	21, incl. 4 KB RETAIN		288, incl. 32 KB RETAIN		
Plug-in memory card [SD card]	128 MB		128 MB		
Cycle time for 1000 instructions in ms binary word floating-point	 0.09 0.3 6		 0.07 0.07 1.6		
Max. number of centralized inputs/outputs Digital inputs Digital outputs Analog inputs Analog outputs	 320 240 160 160		 320 240 160 160		
Max. number of decentralized inputs/outputs	depends on the used standard fieldbus CS31 field bus only: up to 31 stations with up to 120 DIs / 120 DOs per station				
Data buffering	battery		battery		
Real-time clock (with battery back-up)	x		x		
Program execution cyclical time-controlled multi tasking	 x x x		 x x x		
User program protection by password	 x		 x		
Internal interfaces					
COM1: RS232/RS485 configurable Connection Programming, Modbus, ASCII, CS31	 x terminal block x		 x terminal block x		
COM2: RS232/RS485 configurable Connection Programming, Modbus, ASCII	 x SUB-D x		 x SUB-D x		
Integrated Ethernet coupler Ethernet connection		x RJ45		x RJ45	
Integrated ARCNET coupler ARCNET connection					x Coax
Display and 8 function keys Function	x RUN/STOP status, diagnosis		x RUN/STOP status, diagnosis		
Timers	unlimited		unlimited		
Counters	unlimited		unlimited		
Function Block Diagram (FBD) Instruction List (IL) Ladder Diagram (LD) Structured Text (ST) Sequential Function Chart (SFC) Continuous Function Chart (CFC)	x x x x x x		x x x x x x		

Ordering data AC500

The AC500 CPU´s

- 2 serial interfaces integrated, RS232/RS485 configurable
- Display and 8 function keys for diagnosis and status
- Centrally expandable with up to 10 expansion modules locally
- Up to 4 external communication modules simultaneously and in any desired combination
- Optional: SD card for data storage and program backup
- Can also be used as slave on Profibus DP, CANopen and DeviceNet via FieldBusPlug
- Available with communication processors for Ethernet and ARCNET (PM5xx-ARC; PMxx-ETH)



AC500 CPUs, type PM571

Type	Program memory	Cycle time in ms 1000 instructions Bit/Word/Float. point	Integrated coupler	Order code	Weight per piece/kg
PM571	64 KB	0.09/0.3/6	-	1SAP 130 100 R0100	0.135
PM571-ETH	64 KB	0.09/0.3/6	Ethernet	1SAP 130 100 R0170	0.15

AC500 CPUs, type PM581 and PM582

Type	Program memory	Cycle time in ms 1000 instructions Bit/Word/Float. point	Integrated coupler	Order code	Weight per piece/kg
PM581	256 KB	0.07/0.07/1.6	-	1SAP 140 100 R0100	0.135
PM581-ETH	256 KB	0.07/0.07/1.6	Ethernet	1SAP 140 100 R0170	0.15
PM581-ARCNET	256 KB	0.07/0.07/1.6	ARCNET	1SAP 140 100 R0160	0.16
PM582	512 KB	0.07/0.07/1.6	–	1SAP 140 200 R0100	0.135
PM582-ETH	512 KB	0.07/0.07/1.6	Ethernet	1SAP 140 200 R0170	0.15
PM582-ARCNET	512 KB	0.07/0.07/1.6	ARCNET	1SAP 140 200 R0160	0.15

AC500 CPUs, type PM590 and PM591

Type	Program memory	Cycle time in ms 1000 instructions Bit/Word/Float. point	Integrated coupler	Order code	Weight per piece/kg
PM590	2048 KB	0.002/0.006/0.006	-	1SAP 150 000 R0100	0.135
PM590-ETH	2048 KB	0.002/0.006/0.006	Ethernet	1SAP 150 000 R0170	0.15
PM590-ARCNET	2048 KB	0.002/0.006/0.006	ARCNET	1SAP 150 000 R0160	0.16
PM591	4096 KB	0.002/0.006/0.006	-	1SAP 150 100 R0100	0.135
PM591-ETH	4096 KB	0.002/0.006/0.006	Ethernet	1SAP 150 100 R0170	0.15
PM591-ARCNET	4096 KB	0.002/0.006/0.006	ARCNET	1SAT 150 100 R0160	0.16

Ethernet communication module

10/100 Mbit/s, full/half duplex with auto-sensing.
2-port switch integrated.
Transport protocols TCP/IP, UDP/IP, Modbus TCP.
CPU interface: 8 kB dual-port memory.
Contains a separate communication processor, 256 kB RAM memory and 512 kB flash memory.
No external power supply required.

Type	Interfaces	Order code	Weight per piece/kg
CM577-ETH	2 x RJ45	1SAP 170 700 R0001	0.115