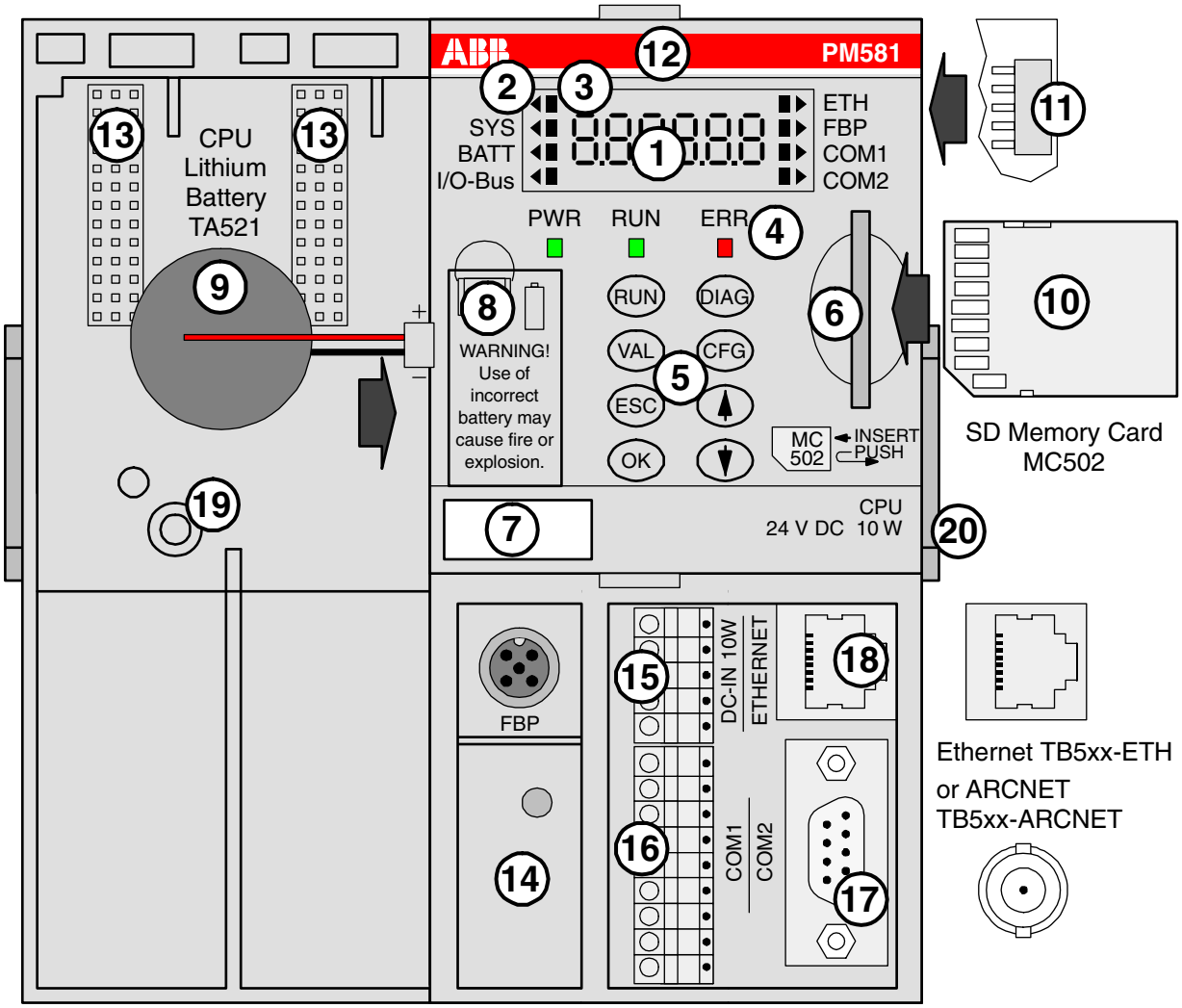
AC500 CPUs PM571, PM581, PM582, PM590 and PM591
- PM5xx-ETH: CPU with network interface Ethernet RJ45
- PM5xx-ARCNET: CPU with network interface ARCNET BNC



Elements of the CPU

1 Six 7-segment status displays with background lighting
2 Triangle displays for ”Item”
3 Square displays for ”Status”
4 Status LEDs
5 Pushbuttons
6 Slot for the SD Memory Card
7 Label
8 Compartment for the Lithium battery
9 Lithium battery TA521
10 SD Memory Card MC502

Elements of the CPU Terminal Base

11 I/O-Bus (10-pole, female) to electrically connect the first I/O Terminal Unit
12 Slot for the CPU (CPU is mounted)
13 Slots for couplers (max. 4)
14 Interface for FieldBusPlug
15 Supply for 24 V DC
16 Serial interface COM1
17 Serial interface COM2
18 Network interface (Ethernet or ARCNET)
19 Holes for wall mounting
20 DIN rail

Figure: CPU PM581-ETH plugged on a Terminal Base TB521

The CPUs PM571, PM581, PM582, PM590 and PM591 are the central units (basic units) of the control system Advant Controller 500 (AC500). The types differ in their performance (memory size, speed etc.). Each CPU must be mounted on a suitable Terminal Base. The Terminal Base type depends on the number of communication modules (couplers) which are used together with the CPU and on the CPU-

Assortment

CPUs

CPU	Program memory	Cycle time for 1000 instructions	Network interface		Other interfaces	Suitable Terminal Bases
			Ether-net	ARC-NET		
PM571	64 kB	Binary: 0.3 ms Word: 0.3 ms Floating point: 6 ms			Serial interfaces COM1 and COM2, FBP, coupler interface, I/O-Bus	TB5xx-xx
PM571-ETH			yes			TB5xx-ETH
PM581	256 kB	Binary: 0.15 ms Word: 0.15 ms Floating point: 3 ms				TB5xx-xx
PM581-ETH			yes			TB5xx-ETH
PM581-ARCNET				yes		TB5xx-ARCNET
PM582	512 kB					TB5xx-xx
PM582-ETH			yes			TB5xx-ETH
PM590	2 MB	Binary: 0.02 ms Word: 0.01 ms Floating point: 0.02 ms				TB5xx-xx
PM590-ETH			yes			TB5xx-ETH
PM590-ARCNET				yes		TB5xx-ARCNET
PM591	4 MB					TB5xx-xx
PM591-ETH			yes			TB5xx-ETH
PM591-ARCNET				yes		TB5xx-ARCNET

For further information see Technical data and Ordering data

Technical data

The system data of AC500 and S500 are valid here. Only additional details are therefore documented below.

General data of the CPUs and the Terminal Bases

For more information, please refer to the "AC500 System Data" chapters.

Connection of the supply voltage 24 V DC at the Terminal Base of the CPU	at a 5-pole removable terminal block with spring connection
Current consumption from 24 V DC	PM571: 50 mA PM571-ETH: 110 mA
	PM581: 50 mA PM581-ETH: 110 mA PM581-ARCNET: 110 mA
	PM582: 50 mA PM582-ETH: 110 mA
	PM59x: 90 mA PM59x-ETH: 150 mA PM59x-ARCNET: 150 mA
Inrush current at 24 V DC	PM571: 1 A^2s PM571-ETH: 1 A^2s
	PM581: 1 A^2s PM581-ETH: 1 A^2s PM581-ARCNET: 1 A^2s
	PM582: 1 A^2s PM582-ETH: 1 A^2s
	PM59x: 1 A^2s PM59x-ETH: 1 A^2s PM59x-ARCNET: 1 A^2s
Max. power dissipation within the module	10 W
Slots on the Terminal Bases	TB511: 1 CPU, 1 communication module
	TB521: 1 CPU, 2 communication modules
	TB524: 1 CPU, 4 communication modules
CPU interfaces at the Terminal Bases	I/O-Bus, COM1, COM2, FBP
CPU network interfaces at the Terminal Bases	TB5xx-ETH / PM5xx-ETH: Ethernet
	TB5xx-ARCNET / PM5xx-ARCNET: ARCNET
Connection system	see AC500 system data
Dimensions	further details see AC500 system data
Width x height x depth	TB511 with CPU: 95.5 x 135 x 75 mm
	TB521 with CPU: 123.5 x 135 x 75 mm
	TB541 with CPU: 179.5 x 135 x 75 mm
Weight (CPU without Terminal Base)	PM571: 135 g PM571-ETH: 150 g
	PM581: 135 g PM581-ETH: 150 g PM581-ARCNET: 160 g
	PM582: 135 g PM582-ETH: 150 g
	PM59x: 135 g PM59x-ETH: 150 g PM59x-ARCNET: 160 g
Mounting position	horizontal or vertical with derating (50 % output load, reduction of temperature to 40°C)

Ordering data

Order No.	Scope of delivery
1SAP 130 100 R0100	PM571, CPU, memory 64 kB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display
1SAP 130 100 R0170	PM571-ETH, CPU, memory 64 kB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display, integrated coupler Ethernet TCP/IP
1SAP 140 100 R0100	PM581, CPU, memory 256 kB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display
1SAP 140 100 R0160	PM581-ARCNET, CPU, memory 256 kB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display, integrated coupler ARCNET
1SAP 140 100 R0170	PM581-ETH, CPU, memory 256 kB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display, integrated coupler Ethernet TCP/IP
1SAP 140 200 R0100	PM582, CPU, memory 512 kB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display
1SAP 140 200 R0170	PM582-ETH, CPU, memory 512 kB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display, integrated coupler Ethernet TCP/IP
1SAP 150 000 R0100	PM590, CPU, memory 2 MB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display
1SAP 150 000 R0160	PM590-ARCNET, CPU, memory 2 MB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display, integrated coupler ARCNET
1SAP 150 000 R0170	PM590-ETH, CPU, memory 2 MB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display, integrated coupler Ethernet TCP/IP
1SAP 150 100 R0100	PM591, CPU, memory 4 MB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display
1SAP 150 100 R0160	PM591-ARCNET, CPU, memory 4 MB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display, integrated coupler ARCNET
1SAP 150 100 R0170	PM591-ETH, CPU, memory 4 MB, 24 V DC, Memory Card Slot, interfaces 2 x RS-232/485 (programming, Modbus/CS31), 1 x FBP, Display, integrated coupler Ethernet TCP/IP
1SAP 180 300 R0001	TA521, Lithium Battery
1SAP 180 100 R0001	MC502, SD Memory Card 128 MB
1SAP 180 200 R0001	TK501, Programming cable SUB-D / SUB-D, length: 5 m
1SAP 180 200 R0101	TK502, Programming cable terminal block / SUB-D, length: 5 m
1SAP 180 800 R0001	TA526, Wall Mounting Accessory
1SAP 111 100 R0170	TB511-ETH, CPU Terminal Base AC500, slots: 1 CPU, 1 communication module, Ethernet RJ45 connector
1SAP 112 100 R0160	TB521-ARCNET, CPU Terminal Base AC500, slots: 1 CPU, 2 communication modules, ARCNET COAX connector
1SAP 112 100 R0170	TB521-ETH, CPU Terminal Base AC500, slots: 1 CPU, 2 communication modules, Ethernet RJ45 connector
1SAP 114 100 R0170	TB541-ETH, CPU Terminal Base AC500, slots: 1 CPU, 4 communication modules, Ethernet RJ45 connector
1SAP 212 200 R0001	TU515, I/O Terminal Unit, 24 V DC, screw-type terminals
1SAP 212 000 R0001	TU516, I/O Terminal Unit, 24 V DC, spring terminals
1SAP 217 200 R0001	TU531, I/O Terminal Unit, 230 V AC, relays, screw-type terminals
1SAP 217 000 R0001	TU532, I/O Terminal Unit, 230 V AC, relays, spring terminals