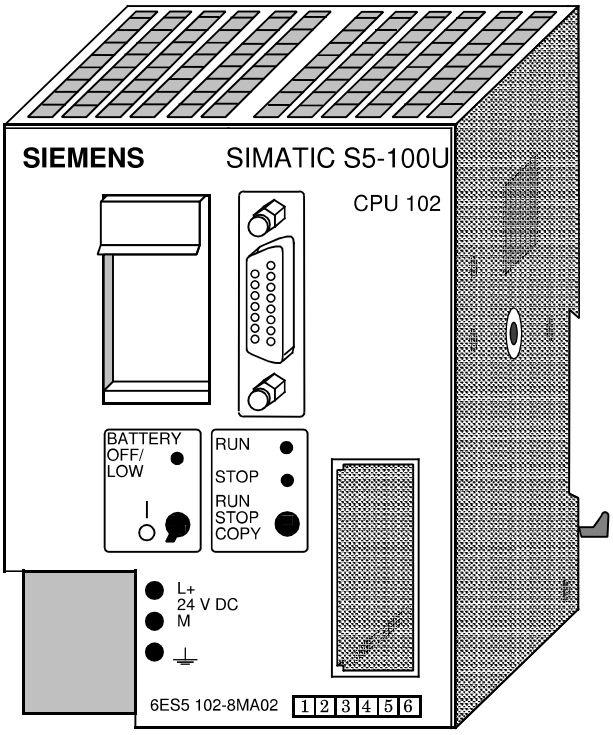
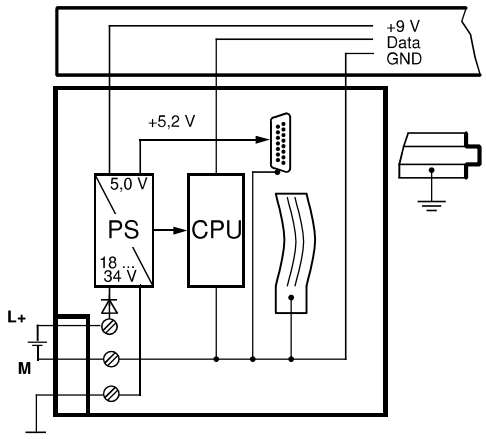
CPU 102 (6ES5 102-8MA02)





Technical specifications

Memory configuration		
- internal memory		RAM 2048 statements
- memory submodule		EPROM/EEPROM
Execution times Normal/Test		
- per binary operation	approx.	7/70 µs
- per word operation	approx.	40/125 µs
Scan monitoring time	approx.	350 ms
Flags		1024; 512 retentive
Timers: Number/range	approx.	32; 0.01 to 9990 s
Counters: Number/range		32; 8 retentive 0 to 999 (up/down)
Digital inputs, Digital outputs	together max.	256
Analog inputs, Analog outputs	together max.	16
Organization blocks		OB1, 21, 22, and 34
Program blocks		0 to 63
Function blocks		
- programmable		0 to 63
- integrated		240 to 243, 250, and 251
Sequence blocks		none
Data blocks		2 to 63
Number of operations	approx.	60
Power supply (internal)		
Input voltage		
- nominal value		24 V DC
- permiss. range		18 to 34 V
Current consumption from +24 V		1 A
Output voltage		
- V 1 (for I/Os)		+9 V
- V 2 (for programmer)		+5.2 V
Output current		
- from V 1		1 A
- from V 2		0.65 A
Short-circuit protection		electronic
Protection class		class 1
Galvanic isolation		no
Backup battery		Lithium Battery (3.4 V/ 850 mAh)
- Backup time	min.	1 year (at 25 °C [77 °F] and uninterrupted backup of CPU)
- Service life	approx.	5 years (at 25 °C [77 °F])
Permissible ambient temperature of PC		
- horizontal arrangement		0 to 60 °C (32 to 140 °F)
- vertical arrangement		0 to 40 °C (32 to 104 °F)
Connector cross-sectional area		
- stranded, with core end sleeves		2×0.5 to 1.5 mm^2
- solid		2×0.5 to 2.5 mm^2
Power losses of the module	typ.	11.4 W
Dimensions (WxHxD) in	mm in.	91.5×135×120 (3.6 x 5.3 x 4.7)
Weight		
- CPU module	approx.	0.65 kg (1.4 lbs)
- memory submodule	approx.	0.1 kg (0.2 lbs)