214-2BM02 - CPUs | CPUs STEP7 programmable, DP master

Order no.	214-2BM02
Type	CPU 214DPM
General information	
Note	-
Features	PROFIBUS-DP master 48 kB work memory 80 kB load memory
Technical data power supply	
Power supply (rated value)	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V
Reverse polarity protection	
Current consumption (no-load operation)	-
Current consumption (rated value)	1.5 A
Inrush current	-
Max. current drain at backplane bus	3 A
Load and working memory	
Load memory, integrated	80 KB
Load memory, maximum	-
Work memory, integrated	48 KB
Work memory, maximal	-
Memory divided in 50% program / 50% data	-
Memory card slot	MMC-Card with max. 512 MB
Hardware configuration	
Racks, max.	4
Modules per rack, max.	total max. 32
Number of integrated DP master	1
Number of DP master via CP	8
Operable function modules	32
Operable communication modules PtP	32
Operable communication modules LAN	-
Status information, alarms, diagnostics	
Status display	yes
Interrupts	no

Process alarm	no
Diagnostic interrupt	no
Command processing times	
Bit instructions, min.	0.18 µs
Word instruction, min.	0.78 µs
Double integer arithmetic, min.	-
Floating-point arithmetic, min.	-
Timers/Counters and their retentive characteristics	
Number of S7 counters	256
Number of S7 times	256
Data range and retentive characteristic	
Number of flags	8192 Bit
Number of data blocks	2047
Max. data blocks size	16 KB
Max. local data size per execution level	1024 Byte
Blocks	
Number of OBs	14
Number of FBs	1024
Number of FCs	1024
Maximum nesting depth per priority class	8
Maximum nesting depth additional within an error OB	1
Time	
Real-time clock buffered	
Clock buffered period (min.)	30 d
Accuracy (max. deviation per day)	10 s
Number of operating hours counter	8
Clock synchronization	-
Synchronization via MPI	-
Synchronization via Ethernet (NTP)	-
Address areas (I/O)	
Input I/O address area	1024 Byte
Output I/O address area	1024 Byte
Input process image maximal	128 Byte
Output process image maximal	128 Byte
Digital inputs	8192

Digital outputs	8192
Digital inputs central	512
Digital outputs central	512
Integrated digital inputs	-
Integrated digital outputs	-
Analog inputs	512
Analog outputs	512
Analog inputs, central	128
Analog outputs, central	128
Integrated analog inputs	-
Integrated analog outputs	-
Communication functions	
PG/OP channel	✓
Global data communication	✓
Number of GD circuits, max.	4
Size of GD packets, max.	22 Byte
S7 basic communication	✓
S7 basic communication, user data per job	76 Byte
S7 communication	✓
S7 communication as server	✓
S7 communication as client	-
S7 communication, user data per job	160 Byte
Number of connections, max.	16
Functionality Sub-D interfaces	
Type	MP²I
Type of interface	RS485
Connector	Sub-D, 9-pin, female
Electrically isolated	-
MPI	✓
MP²I (MPI/RS232)	✓
DP master	-
DP slave	-
Point-to-point interface	-
Type	DP
Type of interface	RS485
Connector	Sub-D, 9-pin, female
Electrically isolated	✓

MPI	-
MP²I (MPI/RS232)	-
DP master	✓
DP slave	-
Point-to-point interface	-
CAN	-
Functionality PROFIBUS master	
PG/OP channel	✓
Routing	-
S7 basic communication	-
S7 communication	-
S7 communication as server	-
S7 communication as client	-
Equidistance support	-
Isochronous mode	-
SYNC/FREEZE	-
Activation/deactivation of DP slaves	✓
Direct data exchange (slave-to-slave communication)	-
DPV1	-
Transmission speed, min.	9.6 kbit/s
Transmission speed, max.	12 Mbit/s
Number of DP slaves, max.	64
Address range inputs, max.	1 KB
Address range outputs, max.	1 KB
User data inputs per slave, max.	244 Byte
User data outputs per slave, max.	244 Byte
Mechanical data	
Dimensions (WxHxD)	50.8 mm x 76 mm x 80 mm
Weight	150 g
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL508 certification	yes