

S7-1500, CM 8xIO-Link, communication module IO-Link Master V1.1; Front connector (screw terminals or push-in) to be ordered separately



General information	
Product type designation	CM 8xIO-Link
HW functional status	FS01
Firmware version	V1.0.0
<ul style="list-style-type: none"> FW update possible 	Yes
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version 	V15.1 with HSP 274
<ul style="list-style-type: none"> STEP 7 configurable/integrated from version 	Configurable via GSD file
<ul style="list-style-type: none"> PROFIBUS from GSD version/GSD revision 	GSD as of Revision 5
<ul style="list-style-type: none"> PROFINET from GSD version/GSD revision 	GSDML V2.34
Supply voltage	
Type of supply voltage	24 V DC
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V

Reverse polarity protection	Yes
Input current	
Current consumption, max.	50 mA; without load
Encoder supply	
Number of outputs	8
Output current	
• Rated value	1 A; 4 A total current per module
24 V encoder supply	
• Short-circuit protection	Yes; per channel, electronic
IO-Link	
Number of ports	8
• of which simultaneously controllable	8
IO-Link protocol 1.0	Yes
IO-Link protocol 1.1	Yes
Cycle time, min.	2 ms
Size of process data, input per port	33 byte; max.
Size of process data, input per module	240 byte; max.
Size of process data, output per port	32 byte; max.
Size of process data, output per module	240 byte; max.
Memory size for device parameter	2 kbyte; for each port
Master backup	Yes
Configuration without S7-PCT	Yes
Cable length unshielded, max.	20 m
Operating modes	
• IO-Link	Yes
• DI	Yes
• DQ	No
Time Based IO	
— TIO IO-Link IN	No
— TIO IO-Link OUT	No
— TIO IO-Link IN/OUT	No
Connection of IO-Link devices	
• Port type A	Yes
• Port type B	Yes; 24 V DC via external terminal
Interrupts/diagnostics/status information	
Alarms	
• Diagnostic alarm	Yes; The port diagnosis is available in the IO-Link mode only.
Diagnoses	
• Monitoring the supply voltage	Yes
• Wire-break	Yes
• Short-circuit	Yes

• Group error	Yes
Diagnostics indication LED	
• Monitoring of the supply voltage (PWR-LED)	Yes; green LED
• Channel status display	Yes; green LED
• for channel diagnostics	Yes; red LED
• for module diagnostics	Yes; red LED
Potential separation	
Potential separation channels	
• between the channels	No
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C; Observe derating
• vertical installation, min.	0 °C
• vertical installation, max.	40 °C; Observe derating
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
last modified:	10/13/2020