

SIMATIC ET 200SP, CM 4 X IO-LINK ST COMMUNICATION
MODULE IO-LINK MASTER V1.1



General information	
Product type designation	ET 200SP, CM 4xIO-Link
Firmware version	V2.0
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC04
Product function	
I&M data	Yes
Engineering with	
STEP 7 TIA Portal configurable/integrated as of version	V13 / V13
STEP 7 configurable/integrated as of version	V5.5 / -
PROFIBUS as of GSD version/GSD revision	GSD Revision 5
PROFINET as of GSD version/GSD revision	V2.3 / -
Supply voltage	
Type of supply voltage	24 V DC
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V; 20.5 V if IO-Link is used, as the supply voltage for IO-Link devices has to be at least 20 V at the master.

permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	45 mA; without load
Encoder supply	
Number of outputs	4
Output current	
• Rated value	200 mA
Power loss	
Power loss, typ.	1 W
Digital outputs	
Cable length	
• unshielded, max.	20 m; Also applies for shielded cables
IO-Link	
Number of ports	4
• of which simultaneously controllable	4
IO-Link protocol 1.0	Yes
IO-Link protocol 1.1	Yes
Transmission rate	4.8 kBaud (COM1); 38.4 kBaud (COM2), 230.4 kBaud (COM3)
Cycle time, min.	2 ms; dynamic, depending on user data length
Size of process data, input per port	32 byte; max.
Size of process data, input per module	32 byte; max.
Size of process data, output per port	32 byte; max.
Size of process data, output per module	32 byte; max.
Memory size for device parameter	2 kbyte; for each port
Cable length unshielded, max.	20 m; max.
Operating modes	
• IO-Link	Yes
• DI	Yes
• DQ	Yes; max. 100 mA
Time Based IO	
— TIO IO-Link IN	Yes
— TIO IO-Link OUT	Yes
— TIO IO-Link IN/OUT	Yes
— TIO Jitter	36 µs; typically ±
Connection of IO-Link devices	
• Port type A	Yes
• Port type B	Yes; 24 V DC via external terminal
Isochronous mode	

Isochronous operation (application synchronized up to terminal)	Yes; For PROFINET only
Equidistance	Yes
Bus cycle time (TDP), min.	250 µs

Interrupts/diagnostics/status information

Status indicator	Yes
Diagnostics function	Yes

Alarms

• Diagnostic alarm	Yes; The port diagnosis is available in the IO-Link mode only.
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Diagnostic messages

• Monitoring the supply voltage	Yes
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Diagnostics indication LED

• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Channel status display	Yes; one green LED for channel status Qn (SIO mode) and port status Cn (IO-Link mode) per channel
• for channel diagnostics	Yes; red Fn LED
• for module diagnostics	Yes; green/red DIAG 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)
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Dimensions

Width	15 mm
Height	73 mm
Depth	58 mm

Weights

Weight, approx.	30 g
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last modified:	10/28/2016
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