



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

General information

Firmware version	V2.0
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC04

Product function

I&M data	Yes
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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

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

Encoder supply

Number of outputs	4
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Output current	
Output current, rated value	200 mA
Power loss	
Power loss, typ.	1 W
Digital outputs	
Cable length	
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 μ s ; typically \pm
Connection of IO-Link devices	
Port type A	Yes
Port type B	Yes ; 24 V DC via external terminal
Isochronous mode	
Isochronous mode (application synchronized up to terminal)	Yes ; For PROFINET only
Equidistance	Yes
Bus cycle time (TDP), min.	250 μ s
Interrupts/diagnostics/status information	
Status indicator	Yes

Alarms	
Diagnostic alarm	Yes ; The port diagnosis is available in the IO-Link mode only.
Diagnostic messages	
Diagnostics	Yes
Monitoring the supply voltage	Yes
Diagnostics indication LED	
Monitoring 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
Galvanic isolation	
Galvanic isolation channels	
between the channels	No
between the channels and the backplane bus	Yes
Permissible potential difference	
between different circuits	75 V DC/60 V AC (base isolation)
Isolation	
Isolation tested with	707 V DC (type test)
Dimensions	
Width	15 mm
Weights	
Weight, approx.	30 g
Status	Jul 28, 2014