



SIMATIC ET 200AL, IO-Link, DI 8x 24 V DC, 8x M8, Degree of protection IP67

General information	
Product type designation	IO-Link DI 8x24VDC
HW functional status	FS01
Firmware version	V1.0.x
Vendor identification (VendorID)	42
Device identifier (DeviceID)	229379
Engineering with	
<ul style="list-style-type: none"> <li>• IODD file</li> </ul>	Yes
Supply voltage	
Load voltage 1L+	
<ul style="list-style-type: none"> <li>• Rated value (DC)</li> <li>• permissible range, lower limit (DC)</li> <li>• permissible range, upper limit (DC)</li> <li>• Reverse polarity protection</li> </ul>	24 V; Supply from 1Us+ of the IO-Link master 18 V 30 V Yes; Against destruction; encoder power supply outputs applied with reversed polarity
Input current	
Current consumption (rated value)	15 mA; without load
Encoder supply	
Number of outputs	8; Supply from 1Us+ of the IO-Link master
24 V encoder supply	
<ul style="list-style-type: none"> <li>• Short-circuit protection</li> <li>• Output current, max.</li> </ul>	Yes; per module, electronic 0.7 A; Total current of all encoders (depending on IO-Link master supply via 1Us+)
Power loss	
Power loss, typ.	1.5 W
Digital inputs	
Number of digital inputs	8
Source/sink input	P-reading
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 55 °C, max.	8
Input voltage	
<ul style="list-style-type: none"> <li>• Rated value (DC)</li> <li>• for signal "0"</li> <li>• for signal "1"</li> </ul>	24 V -30 to +5 V +11 to +30V
Input current	
<ul style="list-style-type: none"> <li>• for signal "1", typ.</li> </ul>	3 mA
Input delay (for rated value of input voltage)	
for standard inputs	

— at "0" to "1", min.	1.2 ms	
— at "0" to "1", max.	4.8 ms	
— at "1" to "0", min.	1.2 ms	
— at "1" to "0", max.	4.8 ms	
<b>Cable length</b>		
• unshielded, max.	30 m	
<b>Encoder</b>		
<b>Connectable encoders</b>		
• 2-wire sensor	Yes	
— permissible quiescent current (2-wire sensor), max.	1.5 mA	
<b>IO-Link</b>		
IO-Link protocol 1.1	Yes	
Transmission rate	38.4 kBd (COM2)	
Cycle time, min.	2.1 ms	
Size of process data, input per module	1 byte	
Size of process data, output per module	0 byte	
Supported IO-Link profiles	common profile	
Cable length unshielded, max.	20 m	
<b>Connection of IO-Link devices</b>		
• Port type A	Yes	
<b>Interrupts/diagnostics/status information</b>		
<b>Alarms</b>		
• Diagnostic alarm	Yes; Parameterizable	
<b>Diagnoses</b>		
• Short-circuit	Yes; Sensor supply to M; module by module	
<b>Diagnostics indication LED</b>		
• Channel status display	Yes; green LED	
• for module diagnostics	Yes; green/red LED	
<b>Potential separation</b>		
<b>Potential separation channels</b>		
• between the channels	No	
• between the channels and the power supply of the electronics	No	
<b>Isolation</b>		
Isolation tested with	707 V DC (type test)	
<b>Degree and class of protection</b>		
IP degree of protection	IP65/67	
<b>Ambient conditions</b>		
<b>Ambient temperature during operation</b>		
• min.	-30 °C	
• max.	55 °C	
<b>connection method</b>		
Design of electrical connection for the inputs and outputs	M8, 3-pole	
Type of electrical connection for IO-Link	M12, 5-pin, A-coded	
<b>Dimensions</b>		
Width	30 mm	
Height	159 mm	
Depth	40 mm	
<b>Weights</b>		
Weight, approx.	124 g	
<b>Classifications</b>		
	<b>Version</b>	<b>Classification</b>
eClass	14	27-24-26-04
eClass	12	27-24-26-04
eClass	9.1	27-24-26-04
eClass	9	27-24-26-04
eClass	8	27-24-26-04
eClass	7.1	27-24-26-04
eClass	6	27-24-26-04

ETIM	10	EC001599
ETIM	9	EC001599
ETIM	8	EC001599
ETIM	7	EC001599
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



[Miscellaneous](#)



Functional Safety

Maritime application

[TUEV](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application



[CCS \(China Classification Society\)](#)



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