

SIMATIC S7-1500, digital input module DI 16x230 V AC BA, 16 channels in groups of 4; Input delay 20 ms; Input type 1 (IEC 61131): Front connector (screw terminals or push-in) to be ordered separately



Figure similar

General information	
HW functional status	FS01
Firmware version	V2.0.0
• FW update possible	Yes
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	V12 / V12
• STEP 7 configurable/integrated as of version	V5.5 SP3 / -
• PROFIBUS as of GSD version/GSD revision	V1.0 / V5.1
• PROFINET as of GSD version/GSD revision	V2.3 / -
Operating mode	
• DI	Yes
• Counter	No
• MSI	Yes
Power	

Power available from the backplane bus	1 W
<b>Power loss</b>	
Power loss, typ.	4.9 W
<b>Digital inputs</b>	
Number of digital inputs	16
Digital inputs, parameterizable	No
Source/sink input	P-reading
Input characteristic curve in accordance with IEC 61131, type 1	Yes
<b>Input voltage</b>	
<ul style="list-style-type: none"> <li>Rated value (AC)</li> <li>for signal "0"</li> <li>for signal "1"</li> </ul>	230 V; 120/230 V AC, 50/60 Hz 0V AC to 40V AC 79V AC to 264V AC
<b>Input current</b>	
<ul style="list-style-type: none"> <li>for signal "1", typ.</li> </ul>	11 mA; At 230 V AC and 5.5 mA at 120 V AC
<b>Input delay (for rated value of input voltage)</b>	
<b>for standard inputs</b>	
— parameterizable	No
— at "0" to "1", max.	25 ms
— at "1" to "0", max.	25 ms
<b>for interrupt inputs</b>	
— parameterizable	No
<b>for technological functions</b>	
— parameterizable	No
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>shielded, max.</li> <li>unshielded, max.</li> </ul>	1 000 m 600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
<ul style="list-style-type: none"> <li>2-wire sensor</li> <li>— permissible quiescent current (2-wire sensor), max.</li> </ul>	Yes 2 mA
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	No
<b>Alarms</b>	
<ul style="list-style-type: none"> <li>Diagnostic alarm</li> <li>Hardware interrupt</li> </ul>	No No
<b>Diagnostic messages</b>	

• Monitoring the supply voltage	No
• Wire-break	No
• Short-circuit	No
<b>Diagnostics indication LED</b>	
• RUN LED	Yes; Green LED
• ERROR LED	Yes; Red LED
• Monitoring of the supply voltage (PWR-LED)	No
• Channel status display	Yes; Green LED
• for channel diagnostics	No
• for module diagnostics	Yes; Red LED
<b>Potential separation</b>	
<b>Potential separation channels</b>	
• between the channels	No
• between the channels, in groups of	4
• between the channels and backplane bus	Yes
<b>Permissible potential difference</b>	
between different circuits	250 V AC between the channels and the backplane bus; 500 V AC between the channels
<b>Isolation</b>	
Isolation tested with	3 100 V DC
<b>Standards, approvals, certificates</b>	
Suitable for safety functions	No
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	40 °C
<b>Decentralized operation</b>	
Prioritized startup	Yes
<b>Dimensions</b>	
Width	35 mm
Height	147 mm
Depth	129 mm
<b>Weights</b>	
Weight, approx.	300 g
<b>last modified:</b>	08/30/2019