

SIMATIC S7-1500, DIGITAL INPUT MODULE DI16 X DC24V, SOURCE; 16 CHANNELS IN GROUPS OF 16; INPUT DELAY 3.2MS; INPUT TYPE 3 (IEC 61131)



Figure similar

General information	
Product type designation	DI 16x24 V DC SRC BA
HW functional status	FS01
Firmware version	V2.0.0
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	Yes
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated as of version</li> </ul>	V12 / V12
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	V5.5 SP3 / -
<ul style="list-style-type: none"> <li>PROFIBUS as of GSD version/GSD revision</li> </ul>	V1.0 / V5.1
<ul style="list-style-type: none"> <li>PROFINET as of GSD version/GSD revision</li> </ul>	V2.3 / -
Operating mode	
<ul style="list-style-type: none"> <li>DI</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Counter</li> </ul>	No
<ul style="list-style-type: none"> <li>MSI</li> </ul>	Yes
Power	

Power available from the backplane bus	0.9 W
<b>Power loss</b>	
Power loss, typ.	2.8 W
<b>Digital inputs</b>	
Number of digital inputs	16
Digital inputs, parameterizable	No
m/p-reading	m-reading
Input characteristic curve in accordance with IEC 61131, type 3	Yes
<b>Input voltage</b>	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-5 to +30V
• for signal "1"	-11 to -30V
<b>Input current</b>	
• for signal "1", typ.	4.5 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— parameterizable	No
— at "0" to "1", min.	3 ms
— at "0" to "1", max.	4 ms
— at "1" to "0", min.	3 ms
— at "1" to "0", max.	4 ms
for interrupt inputs	
— parameterizable	No
for counter/technological functions	
— parameterizable	No
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Encoder</b>	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
Diagnostics	No
<b>Alarms</b>	

• Diagnostic alarm	No
• Hardware interrupt	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	No

<b>Potential separation</b>	
<b>Potential separation channels</b>	
• between the channels	No
• between the channels, in groups of	16
• between the channels and backplane bus	Yes

<b>Isolation</b>	
Isolation tested with	707 V DC (type test)

<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.	230 g

**last modified:** 09.04.2016