

SIMATIC S7-1500 Digital input module, DI 16x24 V DC BA, 16 channels in groups of 16, input delay typ. 3.2 ms, input type 3 (IEC 61131); Delivery incl. front connector Push-in



General information	
HW functional status	FS01
Firmware version	V1.0.0
<ul style="list-style-type: none"> FW update possible 	Yes
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version 	V13 / V13
<ul style="list-style-type: none"> STEP 7 configurable/integrated as of version 	V5.5 SP3 / -
<ul style="list-style-type: none"> PROFIBUS as of GSD version/GSD revision 	V1.0 / V5.1
<ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision 	V2.3 / -
Operating mode	
<ul style="list-style-type: none"> DI 	Yes
<ul style="list-style-type: none"> Counter 	No
<ul style="list-style-type: none"> MSI 	Yes
Supply voltage	
Rated value (DC)	24 V

permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Power	
Power available from the backplane bus	1.05 W
Power loss	
Power loss, typ.	1.8 W
Digital inputs	
Number of digital inputs	16
Digital inputs, parameterizable	No
Source/sink input	P-reading
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Input voltage	
<ul style="list-style-type: none"> • Rated value (DC) • for signal "0" • for signal "1" 	24 V -30 to +5V +11 to +30V
Input current	
<ul style="list-style-type: none"> • for signal "1", typ. 	2.7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
<ul style="list-style-type: none"> — parameterizable — at "0" to "1", min. — at "0" to "1", max. — at "1" to "0", min. — at "1" to "0", max. 	No 3 ms 4 ms 3 ms 4 ms
for interrupt inputs	
<ul style="list-style-type: none"> — parameterizable 	No
for technological functions	
<ul style="list-style-type: none"> — parameterizable 	No
Cable length	
<ul style="list-style-type: none"> • shielded, max. • unshielded, max. 	1 000 m 600 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> • 2-wire sensor <ul style="list-style-type: none"> — permissible quiescent current (2-wire sensor), max. 	Yes 1.5 mA
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No

Interrupts/diagnostics/status information

Diagnostics function No

Alarms

- Diagnostic alarm No
- Hardware interrupt No

Diagnostic messages

- Monitoring the supply voltage No
- Wire-break No
- Short-circuit No

Diagnostics indication LED

- 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

Potential separation

Potential separation channels

- between the channels No
- between the channels, in groups of 16
- between the channels and backplane bus Yes

Isolation

Isolation tested with 707 V DC (type test)

Standards, approvals, certificates

Suitable for safety functions No

Ambient conditions

Ambient temperature during operation

- horizontal installation, min. 0 °C
- horizontal installation, max. 60 °C
- vertical installation, min. 0 °C
- vertical installation, max. 40 °C

Altitude during operation relating to sea level

- Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual

Decentralized operation

Prioritized startup Yes

Dimensions

Width 25 mm
Height 147 mm
Depth 129 mm

Weights

Weight, approx. 230 g

Other

Note: Supplied incl. 40-pole push-in front connectors

last modified: 08/30/2019