

SIMATIC S7-1500, DIGITAL INPUT MODULE DI 16 X 24...125V UC HF, 16 CHANNELS IN GROUPS OF 1; INPUT DELAY 0.05 ... 20MS; INPUT TYPE 3 (IEC 61131); DIAGNOSIS, PROCESSALARMS



General information	
Product type designation	DI 16x24 ... 125VUC HF
HW functional status	FS01
Firmware version	V1.0.0
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	V13 SP1 / -
• 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
• MSI	Yes
Power	
Power available from the backplane bus	1.2 W
Digital inputs	

Number of digital inputs	16
Digital inputs, parameterizable	Yes
m/p-reading	Yes; p-reading
Input characteristic curve in accordance with IEC 61131, type 3	Yes; at 24 V DC
Input voltage	
• Type of input voltage	AC/DC
• Rated value (DC)	24 V; 48 V, 125 V
• Rated value (AC)	24 V; 48 V, 125 V (50 - 60 Hz)
• for signal "0"	-5 ... +5 V
• for signal "1"	+11V DC to +146V DC
Input current	
• for signal "1", typ.	3 mA; at 24 V DC
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.05 / 0.1 / 0.4 / 1.6 / 3.2 / 12.8 / 20 ms parameterizable with DC, 20 ms fixed with AC
— at "0" to "1", min.	0.05 ms
— at "0" to "1", max.	20 ms
— at "1" to "0", min.	0.05 ms
— at "1" to "0", max.	20 ms
for interrupt inputs	
— parameterizable	Yes
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics	Yes
Alarms	
• Diagnostic alarm	Yes
• Hardware interrupt	Yes
Diagnostic messages	
• Wire-break	Yes; To I < 550 µA
Diagnostics indication LED	
• RUN LED	Yes; Green LED
• ERROR LED	Yes; Red LED
• Channel status display	Yes; Green LED

- for channel diagnostics
- for module diagnostics

Yes; Red LED

Yes; Red LED

Potential separation

Potential separation channels

- between the channels
- between the channels, in groups of
- between the channels and backplane bus

Yes

1

Yes

Permissible potential difference

between different circuits

146V DC/132V AC

Isolation

Isolation tested with

1 200V DC

Ambient conditions

Ambient temperature during operation

- horizontal installation, min.
- horizontal installation, max.
- vertical installation, min.
- vertical installation, max.

0 °C

60 °C

0 °C

40 °C

Decentralized operation

Prioritized startup

Yes

Dimensions

Width

35 mm

Height

147 mm

Depth

129 mm

Weights

Weight, approx.

240 g

last modified:

22.01.2016