

SIPLUS S7-1500 DI 16x24 V DC SRC -40...+70 °C with conformal coating based on 6ES7521-1BH50-0AA0 . Digital input module "DI 16x24 V DC, source-input;" "16 channels in groups of 16;" "Input delay 3.2 ms;" Input type 3 (IEC 61131)



Figure similar

General information	
Product type designation	DI 16x24VDC SRC BA
Product function	
• I&M data	Yes; I&M0 to I&M3
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Power	
Power available from the backplane bus	0.9 W
Power loss	
Power loss, typ.	2.8 W
Digital inputs	
Number of digital inputs	16; > +60 °C, number of simultaneously controllable inputs max. 8
Source/sink input	Yes; 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
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
• 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 function	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
• Fuse blown	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             |

### Potential separation

#### Potential separation channels

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

### Permissible potential difference

between different circuits	75 V DC/60 V AC
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### Isolation

Isolation tested with	707 V DC (type test)
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### Ambient conditions

#### Ambient temperature during operation

- |                                 |   |
|---------------------------------|---|
| • horizontal installation, min. | -40 °C; = Tmin  |
| • horizontal installation, max. | 70 °C; = Tmax; > +60 °C number of simultaneously controllable inputs max. 8 |
| • vertical installation, min.   | -40 °C; = Tmin  |
| • vertical installation, max.   | 40 °C; = Tmax   |

#### Altitude during operation relating to sea level

- |  |   |
|--|---|
| • Installation altitude above sea level, max.          | 5 000 m   |
| • Ambient air temperature-barometric pressure-altitude | Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m) |

#### Relative humidity

- |   |   |
|---|---|
| • With condensation, tested in accordance with IEC 60068-2-38, max. | 100 %; RH incl. condensation/frost (no commissioning under condensation conditions) |
|---|---|

#### Resistance

##### Coolants and lubricants

- |   |     |
|---|-----|
| — Resistant to commercially available coolants and lubricants | Yes |
|---|-----|

##### Use in stationary industrial systems

- |   |  |
|---|--|
| — to biologically active substances according to EN 60721-3-3 | Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request |
| — to chemically active substances according to EN 60721-3-3   | Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *           |
| — to mechanically active substances according to EN 60721-3-3 | Yes; Class 3S4 incl. sand, dust, *   |

##### Use on ships/at sea

- to biologically active substances according to EN 60721-3-6
- to chemically active substances according to EN 60721-3-6
- to mechanically active substances according to EN 60721-3-6

Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request

Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); \*

Yes; Class 6S3 incl. sand, dust; \*

from supply voltage 1L+

- Note regarding classification of environmental conditions acc. to EN 60721

\* The supplied plug covers must remain in place over the unused interfaces during operation!

### Decentralized operation

Fast Startup supported Yes; 500 ms

### Dimensions

Width	35 mm
Height	147 mm
Depth	129 mm

### Weights

Weight, approx. 230 g

**last modified:** 05/16/2018