

SIMATIC S7-1500, digital input module, DI 64xDC 24V SNK/SRC BA, 64 channels in groups of 16, input delay typ. 3.2 ms, input type 3 (IEC 61131); sinking/sourcing input. 35 mm wide, cables and terminal blocks to be ordered separately as accessories



General information	
Product type designation	DI 64x24VDC BA
HW functional status	From 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
<ul style="list-style-type: none"> Isochronous mode 	No
<ul style="list-style-type: none"> Prioritized startup 	No
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version 	V16 with HSP 0319 / V17
<ul style="list-style-type: none"> STEP 7 configurable/integrated from version 	V5.5 SP3 / -
<ul style="list-style-type: none"> PROFIBUS from GSD version/GSD revision 	V1.0 / V5.1
<ul style="list-style-type: none"> PROFINET from GSD version/GSD revision 	V2.35 / -
Operating mode	
<ul style="list-style-type: none"> DI 	Yes
<ul style="list-style-type: none"> Counter 	No
<ul style="list-style-type: none"> Oversampling 	No

• MSI	Yes
Supply voltage	
external protection for power supply lines (recommendation)	24 V DC/4 A miniature circuit breaker with type B or C tripping characteristic
Power	
Power available from the backplane bus	0.6 W
Power loss	
Power loss, typ.	4.8 W
Digital inputs	
Number of digital inputs	64
Digital inputs, parameterizable	No
Source/sink input	Yes
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Number of simultaneously controllable inputs	
• Number of simultaneously controllable inputs	64; see additional description in the manual
Input voltage	
• Rated value (DC)	24 V
— 24 V DC	Yes
• for signal "0"	-30 to +5 V
• for signal "1"	+11 to +30V
Input current	
• for signal "1", typ.	2.7 mA
Input delay (for rated value of input voltage)	
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 technological functions	
— parameterizable	No
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 function	No
----------------------	----

Alarms

- | | |
|----------------------|----|
| • Diagnostic alarm | No |
| • Hardware interrupt | No |

Diagnoses

- | | |
|---------------------------------|----|
| • Monitoring the supply voltage | No |
| • Wire-break | No |
| • Short-circuit | No |
| • Group error | No |

Diagnostics indication LED

- | | |
|--|--|
| • RUN LED | Yes; green LED |
| • ERROR LED | Yes; red LED |
| • MAINT LED | No |
| • Monitoring of the supply voltage (PWR-LED) | Yes; via SIMATIC TOP connect connection module |
| • Channel status display | Yes; via SIMATIC TOP connect connection module |
| • for channel diagnostics | No |
| • for module diagnostics | No |

Potential separation

Potential separation channels

- | | |
|--|---|
| • between the channels | No |
| • between the channels, in groups of | 16; 32 when using SIMATIC TOP connect connection module |
| • 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. | -30 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | -30 °C |
| • vertical installation, max. | 40 °C |

Altitude during operation relating to sea level

- | | |
|---|---------|
| • Installation altitude above sea level, max. | 5 000 m |
|---|---------|

Dimensions

Width	35 mm
Height	147 mm

Depth	129 mm
Weights	
Weight, approx.	250 g
Other	
Note:	Please order cable and connection modules separately
last modified:	10/13/2020