



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
<ul style="list-style-type: none"> MSI 	Yes
Supply voltage	
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
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	
<ul style="list-style-type: none"> Number of simultaneously controllable inputs 	64; see additional description in the manual
Input voltage	
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> for signal "0" 	-5 ... +5 V (reference potential is COM)

<ul style="list-style-type: none"> • for signal "1" 	-11 ... -30 V; +11 ... +30 V (reference potential is COM)
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	
— 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	
<ul style="list-style-type: none"> • shielded, max. 	1 000 m
<ul style="list-style-type: none"> • unshielded, max. 	600 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> • 2-wire sensor 	Yes
<ul style="list-style-type: none"> — permissible quiescent current (2-wire sensor), max. 	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	No
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	No
<ul style="list-style-type: none"> • Hardware interrupt 	No
Diagnoses	
<ul style="list-style-type: none"> • Monitoring the supply voltage 	No
<ul style="list-style-type: none"> • Wire-break 	No
<ul style="list-style-type: none"> • Short-circuit 	No
<ul style="list-style-type: none"> • Group error 	No
Diagnostics indication LED	
<ul style="list-style-type: none"> • RUN LED 	Yes; green LED
<ul style="list-style-type: none"> • ERROR LED 	Yes; red LED
<ul style="list-style-type: none"> • MAINT LED 	No
<ul style="list-style-type: none"> • Monitoring of the supply voltage (PWR-LED) 	Yes; via SIMATIC TOP connect connection module
<ul style="list-style-type: none"> • Channel status display 	Yes; via SIMATIC TOP connect connection module
<ul style="list-style-type: none"> • for channel diagnostics 	No
<ul style="list-style-type: none"> • for module diagnostics 	No
Potential separation	
Potential separation channels	
<ul style="list-style-type: none"> • between the channels 	No
<ul style="list-style-type: none"> • between the channels, in groups of 	16; 32 when using SIMATIC TOP connect connection module
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • horizontal installation, min. 	-30 °C
<ul style="list-style-type: none"> • horizontal installation, max. 	60 °C
<ul style="list-style-type: none"> • vertical installation, min. 	-30 °C
<ul style="list-style-type: none"> • vertical installation, max. 	40 °C
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • 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:	4/29/2021 