



Figure similar

32K CONNECT. MOD. TP1 M-READ LED PUSH-IN

Connection module TP1 DI-M read 32 channels a. 4x2 terminals f. Potential supply
Type: Push-in terminal with LED, VPE = 1 unit 50 pole IDC connector f. cable

Technical Product Detail Page	https://i.siemens.com/1P6ES7924-2AK20-0BC0
target system	SIMATIC S7-1500
suitability for use	Digital I/O modules
product type designation	Fully modular connection
product designation	Connection module
electrical data	
operating voltage	
• at DC / rated value	24 V
• rated value	24 V
• at DC / maximum	28.8 V
ampacity / per pin / maximum	1 A
continuous current / at DC / per signal cable / maximum	1 A
total current / maximum	2 A
display version	
• as status display of the inputs/outputs	LED yellow for "active high"
• for power supply / power LED	Yes; green for 24 V DC O.K.
product function / infeed function	Yes
product component	
• PE connection	No
• shield connection	No
• disconnecter	No
product feature / cross-connectable	No
connection method	
number of terminals	48; 32 x I/O; 8 x L+, 8 x M
number of channels	32
type of connecting terminal	push-in
position / of the terminal	Top
number of terminal levels	1
design of terminal / terminal levels internally linked	No
type of electrical connection / for connecting cable	Plug-in connection
number of poles / at the 1st interface	50; IDC connector with installed strain relief for the connecting cable
number of the plug contacts / of the electrical connection	1
wire length / maximum	30 m; between front connector module and Connection module
type of connectable conductor cross-sections / solid	No
connectable conductor cross-section	
• for flexible conductor / with core end processing	0.2 ... 2.5 mm²; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar
• stranded	0.2 ... 2.5 mm²

<ul style="list-style-type: none"> finely stranded / without core end processing 	0.2 ... 2.5 mm ²
<ul style="list-style-type: none"> finely stranded / with core end processing 	0.2 ... 2.5 mm ²
number of cables / per connection	2; Connection for internal system: Combination of 1 or 2 Wires until the sum total of cross sections be achieved in a ferrule.
width of screwdriver blade	3.5 mm

standards, specifications, approvals

certificate of suitability	
<ul style="list-style-type: none"> cULus approval 	Yes
<ul style="list-style-type: none"> IECEX 	Yes
<ul style="list-style-type: none"> ATEX 	Yes
<ul style="list-style-type: none"> ULhazloc approval 	Yes
<ul style="list-style-type: none"> UKEX 	Yes
<ul style="list-style-type: none"> CCC / for hazardous zone according to GB standard 	Yes
design tested acc. to type of protection / EEx e	Yes
overvoltage category	2
degree of pollution	2
combustibility class according to UL 94	V1

standards, specifications, approvals / Environmental Product Declaration

Environmental Product Declaration	Yes
global warming potential [CO ₂ eq]	
<ul style="list-style-type: none"> total 	141.2 kg
<ul style="list-style-type: none"> during manufacturing 	1.6 kg
<ul style="list-style-type: none"> during operation 	139.5 kg
<ul style="list-style-type: none"> after end of life 	0.15 kg

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> during operation 	-30 ... +60 °C
<ul style="list-style-type: none"> during storage 	-40 ... +70 °C

mechanical data

width × height × depth	100 mm × 76 mm × 60 mm
mounting type	DIN rail 35 mm, DIN rail 15 mm
mounting position	any
height / with lowest-profile installation	60 mm
net weight	0.21 kg
insulation material	other
color	
<ul style="list-style-type: none"> of the enclosure 	grey
<ul style="list-style-type: none"> of the light source 	other
product component / required / end cover plate	No

further information / internet links

internet link	
<ul style="list-style-type: none"> to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud
<ul style="list-style-type: none"> to web page: system cabling 	https://siemens.com/simatic-top-connect
<ul style="list-style-type: none"> to website: CAX-Download-Manager 	https://siemens.com/cax
<ul style="list-style-type: none"> to website: Industry Online Support 	https://support.industry.siemens.com

additional information

other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
marketing text	The connection module TP1 DI sourcing input for a 1-wire connection with 32 channels and potential connection with push-in terminals with LED for signaling forms the interface between the connection lines of the I/O brought in from the field and the SIMATIC S7. This is mounted on the DIN rail and, thanks to its functionality with push-in terminals, it is precisely adapted to the task at hand. This connection module is part of the fully modular SIMATIC TOP connect for the fastest and safest system cabling. In addition to a low wiring effort, sources of error during cabling can be significantly reduced. Sensors and actuators from the I/O are connected to the SIMATIC TOP connect terminal modules and are connected with the SIMATIC S7-1500 via the connecting cable and front connector module.

Classifications

	Version	Classification
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eClass	14	27-25-01-12
eClass	12	27-14-11-28
eClass	9.1	27-14-11-28
eClass	9	27-14-11-28
eClass	8	27-14-11-28
eClass	7.1	27-14-11-28
eClass	6	27-14-11-28
ETIM	10	EC000900
ETIM	9	EC000900
ETIM	8	EC000900
ETIM	7	EC000900
UNSPSC	15	39-12-14-10

Approvals / Certificates

General Product Approval	For use in hazardous locations
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[Manufacturer Declaration](#)

[China RoHS](#)


UL


ATEX



BUREAU
VERITAS


IECEX

For use in hazardous locations	Environment
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[CCC-Ex](#)


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EPD

last modified:

11/14/2025 