

Data sheet

6ES7924-2AK20-0BC0



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
• disconnector	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 mm ² ; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar
• stranded	0.2 ... 2.5 mm ²

• finely stranded / without core end processing	0.2 ... 2.5 mm ²	
• 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		
• cULus approval	Yes	
• IECEx	Yes	
• ATEX	Yes	
• ULhazloc approval	Yes	
• UKEX	Yes	
• 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]		
• total	141.2 kg	
• during manufacturing	1.6 kg	
• during operation	139.5 kg	
• after end of life	0.15 kg	
ambient conditions		
ambient temperature		
• during operation	-30 ... +60 °C	
• during storage	-40 ... +70 °C	
mechanical data		
width x height x depth	100 mm x 76 mm x 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		
• of the enclosure	grey	
• of the light source	other	
product component / required / end cover plate	No	
further information / internet links		
internet link		
• to website: Industry Mall	https://mall.industry.siemens.com	
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud	
• to web page: system cabling	https://siemens.com/simatic-top-connect	
• to website: CAx-Download-Manager	https://siemens.com/cax	
• 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

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

[Manufacturer Declaration](#)

[China RoHS](#)



For use in hazardous locations

[CCC-Ex](#)



Environment

last modified: 11/14/2025