SIEMENS

Data sheet



SCALANCE XC324-4 managed layer 2 IE switch, 24x 10/100/1000 Mbit/s RJ45, 4x 1/10 Gbit/s SFP+ port, LED diagnostics,error signaling contact with select/set pushbutton, PROFINET IO device, network management, redundancy functions, office features (RSTP, VLAN, IGMP,...) CLP included in scope of supply assembly: DIN rail/S7 mounting rail.

product type designation	
product brand name	SCALANCE
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10 Gbit/s
interfaces / for communication / integrated	
number of electrical connections	
• for network components or terminal equipment	24; RJ45
number of 10/100/1000 Mbit/s RJ45 ports	
with securing collar	24
number of electrical connections	
• for SFP+	4; 1000 Mbps and 10000 Mbps SFP usable
interfaces / other	
number of electrical connections	
 for operator console 	1
 for signaling contact 	1
• for power supply	1
type of electrical connection	
 for operator console 	USB (2.0 Port, Type B, serial via USB)
 for signaling contact 	2-pole terminal block
for power supply	2 x 2-pin terminal block
design of the removable storage	
• CLP	Yes
operating voltage / of the signaling contacts	
at DC / rated value	24 V
operational current / of the signaling contacts	
at DC / maximum	0.1 A
supply voltage, current consumption, power loss	
product component / connection for redundant voltage supply	Yes
type of voltage / 1 / of the supply voltage	DC
supply voltage / 1 / rated value	24 V
power loss [W] / 1 / rated value	43.2 W
supply voltage / 1 / rated value	19.2 28.8 V
consumed current / 1 / maximum	1.8 A
 type of electrical connection / 1 / for power supply 	2 x 2-pole terminal block
 product component / 1 / fusing at power supply input 	Yes
fuse protection type / 1 / at input for supply voltage	F 10 A / 250V
ambient conditions	
ambient temperature	
 during operation 	-40 +60 °C
during storage	-40 +85 °C

during transport	-40 +85 °C
relative humidity	
at 25 °C / without condensation / during operation /	95 %
maximum	
operating condition / fanless operation	Yes
protection class IP	IP20
design, dimensions and weights	
design	compact
width	210 mm
height	147 mm
depth	125 mm
net weight	1.9 kg
fastening method	
19-inch installation	No
35 mm top hat DIN rail mounting	Yes
wall mounting	Yes
S7-300 rail mounting	Yes
S7-1500 rail mounting	Yes
product features, product functions, product components / gene	
cascading in the case of a redundant ring / at reconfiguration	50
time of <\~0.3\~s	
number of automatically learnable MAC addresses	16382
number of QoS queues / per port	8
product function	
 QoS according to IEEE 802.1Q 	Yes
product feature	
 Store & Forward switching method 	Yes
product functions / management, configuration, engineering	
product function	
• CLI	Yes
 web-based management 	Yes
MIB support	Yes
TRAPs via email	Yes
• configuration with STEP 7	Yes
• RMON	Yes
port mirroring	Yes
multiport mirroring	Yes
• CoS	Yes
PROFINET IO diagnosis	Yes
switch-managed	Yes
PROFINET conformity class	В
network load class / according to PROFINET	3
telegram length / for Ethernet / maximum	2048 byte
protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• SFTP	Yes
• BOOTP	No
• NETCONF	Yes
• GMRP	Yes
• DCP	Yes
• LLDP	Yes
• EtherNet/IP	Yes
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
IGMP (snooping/querier)	Yes
identification & maintenance function	
MOTATION OF THAIRCONAING INFINITION	

 I&M0 - device-specific information 	Yes
I&M1 - higher level designation/location designation	Yes
product functions / diagnostics	165
product function	
port diagnostics	Yes
statistics Packet Size	Yes
	Yes
statistics packet type	Yes
• error statistics	Yes
SysLog product functions / VLAN	res
product function	
VLAN - port based	Yes
·	No
 VLAN - protocol-based VLAN - IP-based 	No
	Yes
VLAN dynamic number of VLANs / maximum	257
	257
number of VLANs - dynamic / maximum	
number of VLANs / at ring redundancy (HRP; MRP; standby link)	257
product functions / DHCP	
product function	
DHCP server	Yes
DHCP client	Yes
DHCP Option 82	Yes
DHCP Option 66	Yes
DHCP Option 67	Yes
product functions / redundancy	
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
 media redundancy protocol (MRP) with redundancy manager 	Yes
 Media Redundancy Protocol Interconnection (MRP-I) 	Yes
 of the PROFINET IO device / is supported / H-Sync forwarding 	Yes
 of the PROFINET IO device / is supported / PROFINET system redundancy 	Yes
ring redundancy	Yes
 high speed redundancy protocol (HRP) with redundancy manager 	Yes
 high speed redundancy protocol (HRP) with standby redundancy 	Yes
redundancy procedure STP	Yes
redundancy procedure RSTP	Yes
• redundancy procedure RSTP+	Yes
redundancy procedure MSTP	Yes
 High-availability Seamless Redundancy (HSR) Parallel Redundancy Protocol (PRP)/operation in the 	Yes Yes
PRP-network • Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)	Yes
passive listening	Yes
• eRSTP	Yes
protocol / is supported	
STP/RSTP	Yes
• STP	Yes
• RSTP	Yes
RSTP big network support	Yes
• LACP	Yes
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
product functions / security	160
product functions / security	
IEEE 802.1x (radius)	Yes
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broadcast/multicast/unicast limiter	Yes
broadcast blocking	Yes
protocol / is supported	
• SSH	Yes
• SSL	Yes
product functions / time	
product function	
SICLOCK support	Yes
NTP-client	Yes
SNTP client	Yes
IEEE 1588 v2 transparent forwarding	Yes
protocol / is supported	
• NTP	Yes
• SNTP	Yes
IEEE 1588 profile default	No
accuracy / at IEEE 1588 v2	
not less than	100 μs
• typical	50 ns
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
 UKCA marking 	Yes
• cULus approval	Yes
KC approval	Yes
Regulatory Compliance Mark (RCM)	Yes
product conformity / according to EMC-guideline	2014/30/EU
standard	
 for EMC interference emission 	EN 61000-6-4
• for immunity to EMC	EN 61000-6-2
• for safety / from CSA and UL	UL 60950-1 E115352, UL-61010-2 E85972
standards, specifications, approvals / hazardous environments	
certificate of suitability	
• ATEX	Yes
• UKEX	Yes
• IECEx	Yes
ULhazloc approval	Yes
CCC / for hazardous zone according to GB standard	Yes
FM registration	Yes
standards, specifications, approvals / other	
certificate of suitability	
railway application in accordance with EN 50121-4	Yes; use only in areas not accessible to the public
• railway application in accordance with EN 50121-4	1 00, and only in areas not accessible to the public
Tailway application in accordance with EN 30125-3	Voc. Section 4.2: Class AV (up to 2000m); section 4.2: T1: Containers N.T.C.
	Yes; Section 4.2: Class AX (up to 2000m); section 4.3: T1: Containers N.T.C and T.C. / Buildings N.C.C and C.C, T2: Containers N.T.C and T.C. / Buildings N.C.C and C.C., TX: Containers N.T.C and T.C. / Buildings N.C.C and C.C., derating according to the manual must be observed when SFP/SFP+ transceivers are used> only for variants with optical connections; In addition, depending on the installation position, the derating according to the manual must be taken into account; section 4.4: T1: Containers C.C. / Buildings N.C.C and C.C., T2: Containers C.C. / Buildings N.C.C and C.C., T3: Containers C.C. / Buildings N.C.C and C.C.; section 4.11: C1: Indoor, C2: Indoor (except condensation), C3: Indoor (except condensation), 4B1, 4S10, UL 61010-2-10; section 4.13: partially, Test Fc: Vibration EN 60068-2-6; IEC 60068-2-6, Test Ea: Shock EN 60068-2-27; IEC 60068-2-27, Test Ec: Rough handling, shocks EN 60068-2-31; IEC 60068-2-31; section 4.14: yes; section 4.15: yes, according to manual.
resistance to air pollution / conformity according to ANSI/ISA-71.04	and T.C. / Buildings N.C.C and C.C, T2: Containers N.T.C and T.C. / Buildings N.C.C and C.C., TX: Containers N.T.C and T.C. / Buildings N.C.C and C.C., derating according to the manual must be observed when SFP/SFP+ transceivers are used> only for variants with optical connections; In addition, depending on the installation position, the derating according to the manual must be taken into account; section 4.4: T1: Containers C.C. / Buildings N.C.C and C.C., T2: Containers C.C. / Buildings N.C.C and C.C., T3: Containers C.C. / Buildings N.C.C and C.C.; section 4.11: C1: Indoor, C2: Indoor (except condensation), C3: Indoor (except condensation), 4B1, 4S10, UL 61010-2-10; section 4.13: partially, Test Fc: Vibration EN 60068-2-6; IEC 60068-2-6, Test Ea: Shock EN 60068-2-27; IEC 60068-2-27, Test Ec: Rough handling, shocks EN 60068-2-31; IEC 60068-2-31; section 4.14: yes; section 4.15: yes, according to manual.
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71.04 IT security for industrial automation systems / according to IEC 62443-4-2:2019 standards, specifications, approvals / Environmental Product D Environmental Product Declaration global warming potential [CO2 eq]	and T.C. / Buildings N.C.C and C.C, T2: Containers N.T.C and T.C. / Buildings N.C.C and C.C., TX: Containers N.T.C and T.C. / Buildings N.C.C and C.C., derating according to the manual must be observed when SFP/SFP+ transceivers are used> only for variants with optical connections; In addition, depending on the installation position, the derating according to the manual must be taken into account; section 4.4: T1: Containers C.C. / Buildings N.C.C and C.C., T2: Containers C.C. / Buildings N.C.C and C.C., T3: Containers C.C. / Buildings N.C.C and C.C.; section 4.11: C1: Indoor, C2: Indoor (except condensation), C3: Indoor (except condensation), 4B1, 4S10, UL 61010-2-10; section 4.13: partially, Test Fc: Vibration EN 60068-2-6; IEC 60068-2-6, Test Ea: Shock EN 60068-2-27; IEC 60068-2-27, Test Ec: Rough handling, shocks EN 60068-2-31; IEC 60068-2-31; section 4.14: yes; section 4.15: yes, according to manual. Yes Yes eclaration
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after end of life	0.91 kg
product functions / general	
MTBF	15.6 a
reference code	
 according to IEC 81346-2 	KF
 according to IEC 81346-2:2019 	KFE
Warranty period	5 a
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
 to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud
 to website: Industrial communication 	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
to website: Image database	https://www.automation.siemens.com/bilddb
to website: CAx-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic,

necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates,

subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is

Approvals / Certificates

For use in hazardous locations

Environment

Industrial Communication

<u>FM</u>





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