



SCALANCE XC224-4C G manageable Layer 2 IE switch; IEC 62443-4-2 certified; Full gigabit; 20x 10/100/1000 Mbps RJ45 ports; 4x 1000 Mbps combo ports (either 1000 Mbps/ SFPs or 10/100/1000 Mbps RJ45 ports can be used); 1x console port; diagnostics LED; redundant power supply; temperature range -40 °C to +70 °C; assembly: DIN rail/S7 mounting rail/wall; redundancy functions; office features (RSTP, VLAN,...); PROFINET IO device; Ethernet/IP-compliant; C-PLUG slot; IEEE 1588v2 PTP

product type designation	
product brand name	SCALANCE
product type designation	XC224-4C G
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/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	24
number of combo ports / with RJ45 interface for optical plug-in transceiver	4; 1000 Mbit/s SFPs
interfaces / for communication / plug-in	
number of electrical connections	
• for SFP	4
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	RJ11
• for signaling contact	2-pole terminal block
• for power supply	3-pole terminal block, permanently installed
design of the removable storage	
• C-PLUG	Yes
operating voltage / of the signaling contacts	
• at DC / rated value	24 V
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	16.8 W
• supply voltage / 1 / rated value	9.6 ... 31.2 V
• consumed current / 1 / maximum	0.7 A
• type of electrical connection / 1 / for power supply	3-pole terminal block, permanently installed
• product component / 1 / fusing at power supply input	Yes
• fuse protection type / 1 / at input for supply voltage	3.15 A / 125 V
ambient conditions	
ambient temperature	
• during operation	-40 ... +70 °C

<ul style="list-style-type: none"> during storage during transport 	-40 ... +85 °C
relative humidity	
<ul style="list-style-type: none"> at 25 °C / without condensation / during operation / maximum 	95 %
protection class IP	IP20
design, dimensions and weights	
design	compact
width	140 mm
height	150 mm
depth	125 mm
net weight	1.3 kg
material / of the enclosure	Polycarbonate (PC-GF10) / pressure die cast aluminum
fastening method	
<ul style="list-style-type: none"> 35 mm DIN-rail mounting wall mounting S7-300 rail mounting S7-1500 rail mounting 	Yes No Yes Yes
product features, product functions, product components / general	
cascading in the case of a redundant ring / at reconfiguration time of ≤ 0.3-s	50
cascading in cases of star topology	any (depending only on signal propagation time)
product function	
<ul style="list-style-type: none"> QoS according to DSCP 	Yes
product feature	
<ul style="list-style-type: none"> Cut Through switching method Store & Forward switching method 	No Yes
product functions / management, configuration, engineering	
product function	
<ul style="list-style-type: none"> CLI web-based management MIB support TRAPs via email configuration with STEP 7 RMON SMTP server port mirroring multiport mirroring CoS PROFINET IO diagnosis switch-managed 	Yes Yes Yes Yes Yes Yes No Yes Yes Yes Yes Yes
PROFINET conformity class	B
network load class / according to PROFINET	3
telegram length / for Ethernet / maximum	10240 byte
protocol / is supported	
<ul style="list-style-type: none"> Telnet HTTP HTTPS TFTP SFTP BOOTP GMRP DCP LLDP EtherNet/IP SNMP v1 SNMP v2 SNMP v3 IGMP (snooping/querier) 	Yes Yes Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function	
<ul style="list-style-type: none"> I&M0 - device-specific information 	Yes

<ul style="list-style-type: none"> • I&M1 - higher level designation/location designation 	Yes
product functions / diagnostics	
product function	
<ul style="list-style-type: none"> • port diagnostics 	Yes
<ul style="list-style-type: none"> • statistics Packet Size 	Yes
<ul style="list-style-type: none"> • statistics packet type 	Yes
<ul style="list-style-type: none"> • error statistics 	Yes
<ul style="list-style-type: none"> • SysLog 	Yes
product functions / VLAN	
product function	
<ul style="list-style-type: none"> • VLAN - port based 	Yes
<ul style="list-style-type: none"> • VLAN - protocol-based 	No
<ul style="list-style-type: none"> • VLAN - IP-based 	No
number of VLANs / maximum	257
number of VLANs - dynamic / maximum	257
number of VLANs / at ring redundancy (HRP; MRP; standby link)	257
product functions / DHCP	
product function	
<ul style="list-style-type: none"> • DHCP server 	Yes
<ul style="list-style-type: none"> • DHCP client 	Yes
<ul style="list-style-type: none"> • DHCP Option 82 	Yes
<ul style="list-style-type: none"> • DHCP Option 66 	Yes
<ul style="list-style-type: none"> • DHCP Option 67 	Yes
product functions / redundancy	
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
<ul style="list-style-type: none"> • media redundancy protocol (MRP) with redundancy manager 	Yes
<ul style="list-style-type: none"> • Media Redundancy Protocol Interconnection (MRP-I) 	Yes
<ul style="list-style-type: none"> • of the PROFINET IO device / is supported / H-Sync forwarding 	Yes
<ul style="list-style-type: none"> • of the PROFINET IO device / is supported / PROFINET system redundancy 	Yes
<ul style="list-style-type: none"> • ring redundancy 	Yes
<ul style="list-style-type: none"> • high speed redundancy protocol (HRP) with redundancy manager 	Yes
<ul style="list-style-type: none"> • high speed redundancy protocol (HRP) with standby redundancy 	Yes
<ul style="list-style-type: none"> • redundancy procedure STP 	Yes
<ul style="list-style-type: none"> • redundancy procedure RSTP 	Yes
<ul style="list-style-type: none"> • redundancy procedure RSTP+ 	Yes
<ul style="list-style-type: none"> • redundancy procedure MSTP 	Yes
<ul style="list-style-type: none"> • Parallel Redundancy Protocol (PRP)/operation in the PRP-network 	Yes
<ul style="list-style-type: none"> • Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA) 	No
<ul style="list-style-type: none"> • passive listening 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • LACP 	Yes
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • RADIUS client 	Yes
<ul style="list-style-type: none"> • broadcast/multicast/unicast limiter 	Yes
<ul style="list-style-type: none"> • broadcast blocking 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SSH 	Yes
<ul style="list-style-type: none"> • SSL 	Yes
product functions / time	
product function	

<ul style="list-style-type: none"> • SICLOCK support 	Yes
<ul style="list-style-type: none"> • NTP-client 	Yes
<ul style="list-style-type: none"> • SNTP client 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes
<ul style="list-style-type: none"> • IEEE 1588 profile default 	Yes
standards, specifications, approvals	
certificate of suitability	
<ul style="list-style-type: none"> • CE marking 	Yes
product conformity / according to EMC-guideline	2014/30/EU
standard	
<ul style="list-style-type: none"> • for EMC interference emission 	EN 61000-6-4, EN 50121-4
<ul style="list-style-type: none"> • for immunity to EMC 	EN 61000-6-2, EN 50121-4
<ul style="list-style-type: none"> • for safety / from CSA and UL 	UL 60950-1 E115352, UL-61010-2 E85972
standards, specifications, approvals / hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> • ATEX 	Yes
<ul style="list-style-type: none"> • UKEX 	Yes
<ul style="list-style-type: none"> • IECEx 	Yes
<ul style="list-style-type: none"> • ULhazloc approval 	Yes
<ul style="list-style-type: none"> • CCC / for hazardous zone according to GB standard 	Yes
<ul style="list-style-type: none"> • FM registration 	Yes
standards, specifications, approvals / other	
certificate of suitability	
<ul style="list-style-type: none"> • railway application in accordance with EN 50121-4 	Yes
<ul style="list-style-type: none"> • RoHS conformity 	Yes
resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
IT security for industrial automation systems / according to IEC 62443-4-2:2019	Yes
standards, specifications, approvals / marine classification	
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	Yes
<ul style="list-style-type: none"> • French marine classification society (BV) 	Yes
<ul style="list-style-type: none"> • Chinese Classification Society (CCS) 	Yes
<ul style="list-style-type: none"> • DNV GL 	Yes
<ul style="list-style-type: none"> • Korean Register of Shipping (KRS) 	Yes
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	Yes
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	Yes
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	Yes
<ul style="list-style-type: none"> • Royal Institution of Naval Architects (RINA) 	Yes
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> • total 	339.9 kg
<ul style="list-style-type: none"> • during manufacturing 	57.33 kg
<ul style="list-style-type: none"> • during operation 	281.79 kg
<ul style="list-style-type: none"> • after end of life 	0.76 kg
product functions / general	
MTBF	20 a
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 	KF
<ul style="list-style-type: none"> • according to IEC 81346-2:2019 	KFE
Warranty period	5 a
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors 	https://support.industry.siemens.com/cs/ww/en/view/109766358
<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 website: Industrial communication 	https://www.siemens.com/simatic-net

- to web page: SiePortal
- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

- <https://sieportal.siemens.com/>
- <https://www.automation.siemens.com/bilddb>
- <https://www.siemens.com/cax>
- <https://support.industry.siemens.com>

security information

security information

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Approvals / Certificates

General Product Approval



[Declaration of Conformity](#)



EMV

For use in hazardous locations

Marine / Shipping

[KC](#)



[FM](#)

[CCC-Ex](#)



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Marine / Shipping

Environment

Industrial Communication

[CCS \(China Classification Society\)](#)



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