



SCALANCE XC224-4C G manageable layer 2 IE Switch; Full Gigabit; 20x 10/100/1000 Mbps RJ45 ports; 4x 1000 Mbps combo ports (either 1000 Mbps s SFPs or 10/100/1000 Mbps RJ45 ports can be used); 1x console port; Diagnostic LED; redundant power supply; Temp. range -40 °C to +70 °C; Mounting: Standard mounting rail/S7 mounting rail/wall; redundancy functions; office features (RSTP, VLAN ,...); PROFINET IO Device; Ethernet/IP conformity; C-PLUG shaft;

Product type designation	SCALANCE 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 / Integrated	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; 1000 MBit/s
Interfaces / other	
Number of electrical connections • for operator console	1
• for signaling contact	1
• for power supply	1

<ul style="list-style-type: none"> • for redundant voltage supply 	1
Type of electrical connection	
<ul style="list-style-type: none"> • for operator console • for signaling contact • for power supply 	RJ11 2-pole terminal block 3-pole terminal block, permanently installed
design of the removable storage	
<ul style="list-style-type: none"> • C-PLUG 	Yes

Signal inputs/outputs

Operating voltage / of the signaling contacts	
<ul style="list-style-type: none"> • at DC / Rated value 	24 V

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage	
<ul style="list-style-type: none"> • external • external / minimum • external / maximum 	24 V 9.6 V 31.2 V
Supply voltage / 4 / Rated value	
<ul style="list-style-type: none"> • Consumed current / 4 / at rated supply voltage / maximum 	0.7 A
Product component / fusing at power supply input	Yes
Fuse protection type / at input for supply voltage	3.15 A / 125 V
Power loss [W]	
<ul style="list-style-type: none"> • at DC / at 24 V 	16.8 W

Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	-40 ... +70 °C -40 ... +85 °C -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
Mounting type	
<ul style="list-style-type: none"> • 35 mm DIN rail mounting 	Yes

• wall mounting	No
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes

Product features, product functions, product components / general

Cascading in the case of a redundant ring / at reconfiguration time of $\leq 0.3\text{ s}$	50
Cascading in cases of star topology	any (depending only on signal propagation time)
Product function / QoS according to DSCP	Yes
Product feature	
• Cut Through switching method	No
• 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
• SMTP server	No
• Port mirroring	Yes
• multiport mirroring	Yes
• CoS	Yes
• PROFINET IO diagnosis	Yes
PROFINET conformity class	B
Product function / switch-managed	Yes
Telegram length / for Ethernet / maximum	1632 byte
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• BOOTP	No
• 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	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

Product functions / Diagnostics

Product function	
• Port diagnostics	Yes
• Statistics Packet Size	Yes
• Statistics packet type	Yes
• Error statistics	Yes
• SysLog	Yes

Product functions / VLAN

Product function	
• VLAN - port based	Yes
• VLAN - protocol-based	No
• VLAN - IP-based	No
Number of VLANs / maximum	257
Number of VLANs - dynamic / maximum	257
Protocol / is supported / GVRP	Yes

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

Product function	
• of the PROFINET IO device / is supported / PROFINET system redundancy (S2)	Yes
• Ring redundancy	Yes
• High Speed Redundancy Protocol (HRP)	Yes
• high speed redundancy protocol (HRP) with redundancy manager	Yes
• high speed redundancy protocol (HRP) with standby redundancy	Yes
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product function	
• media redundancy protocol (MRP) with redundancy manager	Yes

<ul style="list-style-type: none"> • of the PROFINET IO device / is supported / H-Sync forwarding 	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 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

Product functions / Security

Product function	
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	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

System modification during operation

Product function / configuration in RUN via CiR/H-CiR	Yes
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Standards, specifications, approvals

Security for industrial automation and control systems / acc. to IEC 62443-4-2:2019	Yes
MTBF	20 y

Standards, specifications, approvals / CE

Certificate of suitability / 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 50121-16
<ul style="list-style-type: none"> • for immunity to EMI 	EN 61000-6-2, EN 50121-16

Certificate of suitability / RoHS conformity

Yes; 2011/65/EU

last modified:

05/13/2020