



SCALANCE XC224 managed Layer 2 IE switch; IEC 62443-4-2 certified; 24x 10/100 Mbps RJ45 ports 1x console port, diagnostics LED; redundant power supply; temp. range -40 °C to +70 °C; mounting: DIN rail/S7 mounting rail/wall Office redundancy functions features (RSTP, VLAN,...); PROFINET IO device Ethernet/IP-compliant, C-plug slot;

product type designation		SCALANCE XC224
transfer rate		
transfer rate		10 Mbit/s, 100 Mbit/s
interfaces / for communication / integrated		
number of electrical connections		
<ul style="list-style-type: none"> for network components or terminal equipment 		24; RJ45
number of 10/100 Mbit/s RJ45 ports / integrated		
<ul style="list-style-type: none"> with securing collar 		24
interfaces / other		
number of electrical connections		
<ul style="list-style-type: none"> for operator console 		1
<ul style="list-style-type: none"> for signaling contact 		1
<ul style="list-style-type: none"> for power supply 		1
type of electrical connection		
<ul style="list-style-type: none"> for operator console 		RJ11
<ul style="list-style-type: none"> for signaling contact 		2-pole terminal block
<ul style="list-style-type: none"> for power supply 		4-pole terminal block
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
operational current / of the signaling contacts		
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> supply voltage / 1 / rated value 		24 V
<ul style="list-style-type: none"> power loss [W] / 1 / rated value 		9 W
<ul style="list-style-type: none"> consumed current / 1 / at rated supply voltage / maximum 		0.375 A
<ul style="list-style-type: none"> supply voltage / 1 / rated value 		9.6 ... 31.2 V
<ul style="list-style-type: none"> consumed current / 1 / maximum 		0.75 A
<ul style="list-style-type: none"> type of electrical connection / 1 / for power supply 		4-pole terminal block
<ul style="list-style-type: none"> product component / 1 / fusing at power supply input 		Yes
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	120 mm
height	147 mm
depth	125 mm
net weight	0.88 kg
material / of the enclosure	Polycarbonate (PC-GF10) / pressure die cast aluminum
fastening method	
<ul style="list-style-type: none"> 35 mm top hat DIN rail mounting wall mounting S7-300 rail mounting S7-1500 rail mounting 	Yes Yes Yes Yes
product features, product functions, product components / general	
cascading in the case of a redundant ring / at reconfiguration time of <1~0.3~s	50
cascading in cases of star topology	any (depending only on signal propagation time)
product function / 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 	Yes Yes Yes Yes Yes Yes No Yes Yes Yes Yes
PROFINET conformity class	B
product function / switch-managed	Yes
telegram length / for Ethernet / maximum	1632 byte
protocol / is supported	
<ul style="list-style-type: none"> Telnet HTTP HTTPS TFTP BOOTP GMRP DCP LLDP EtherNet/IP SNMP v1 SNMP v2 SNMP v3 IGMP (snooping/querier) 	Yes Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes 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
• VLAN dynamic	Yes
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	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
• Media Redundancy Protocol Interconnection (MRP-I)	Yes
• of the PROFINET IO device / is supported / H-Sync forwarding	Yes
• redundancy procedure STP	Yes
• redundancy procedure RSTP	Yes
• redundancy procedure RSTP+	Yes
• redundancy procedure MSTP	Yes
• Parallel Redundancy Protocol (PRP)/operation in the PRP-network	Yes
• Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)	No
• passive listening	Yes
protocol / is supported	
• LACP	Yes
product functions / security	
product function	
• IEEE 802.1x (radius)	Yes
• 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
protocol / is supported	
• NTP	Yes
• SNTP	Yes
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
standards, specifications, approvals	
IT security for industrial automation systems / according to IEC 62443-4-2:2019	Yes
MTBF	41 y
standards, specifications, approvals / CE	
certificate of suitability / CE marking	Yes
product conformity / according to EMC-guideline	2014/30/EU
standard	
• for EMC interference emission	EN 61000-6-4, EN 50121-4
• for immunity to EMC	EN 61000-6-2, EN 50121-4
certificate of suitability / RoHS conformity	Yes; 2011/65/EU
standards, specifications, approvals / hazardous environments	
certificate of suitability	
• ATEX	Yes; EN 60079-0, EN 60079-15
• for ATEX / as marking	II 3 G Ex nA II T4 Gc
• for ATEX / as certificate	KEMA 07ATEX0145 X
• IECEx	Yes; IEC 60079-0, IEC 60079-15
• for IECEx / as marking	Ex nA II T4 Gc
• for IECEx / as certificate	IECEx DEK 14.0025X
• CCC / for hazardous zone according to GB standard	Yes
• for cULus HazLoc / as marking	CL1, DIV2, Group A,B,C,D T4, CL1, Zone 2, Group IIC, T4
• for cULus HazLoc / as File Nr.	E240480 (NWHP, NWHP7)
• FM registration	Yes; FM class 3600:2011, FM class 3611:2004, FM class 3810:2005, ANSI/ISA-61010-1:2004
• for FM / as marking	CL1, DIV2, group A,B,C,D T4, CL1, Zone 2, group IIC, T4 Ta: -40 °C +70 °C
• for FM / as certificate	FM16US0205X
standards, specifications, approvals / other	
certificate of suitability	
• railway application in accordance with EN 50121-4	Yes
• Regulatory Compliance Mark (RCM)	Yes
• for UL 61010-2-201 / as File Nr.	E85972 (NRAQ, NRAQ7)
• for UL 60950-1 / as File Nr.	E115352 (NWGQ, NWGQ7)
• EAC approval	Yes
standards, specifications, approvals / marine classification	
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	Yes
• DNV GL	Yes
• Korean Register of Shipping (KRS)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
• Polski Rejestr Statkow (PRS)	Yes
• Royal Institution of Naval Architects (RINA)	Yes
accessories	

product extension / optional / C-PLUG	Yes
further information / internet-Links	
Internet-Link	
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAX-Download-Manager • to website: Industry Online Support 	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
security information	
security information	<p>Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.automation.siemens.com. (V3.4)</p>

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