



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	
• for network components or terminal equipment	24; RJ45
number of 10/100 Mbit/s RJ45 ports / integrated	
• with securing collar	24
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	4-pole terminal block
design of the removable storage	
• C-PLUG	Yes
signal inputs/outputs	
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	9 W
• consumed current / 1 / at rated supply voltage / maximum	0.375 A
• supply voltage / 1 / rated value	9.6 ... 31.2 V
• consumed current / 1 / maximum	0.75 A
• type of electrical connection / 1 / for power supply	4-pole terminal block
• 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 $\sim 0.3\text{ s}$	50
cascading in cases of star topology	any (depending only on signal propagation time)
product function / QoS according to DSCP	Yes
product feature	
<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 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 DGP 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	

<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
<ul style="list-style-type: none"> ● VLAN dynamic 	Yes
number of VLANs / maximum	257
number of VLANs - dynamic / maximum	257
protocol / is supported / GVRP	Yes
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	
product function	
<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) 	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
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"> ● 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
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 • SSL 	<p>Yes</p> <p>Yes</p>
product functions / time	
product function	
<ul style="list-style-type: none"> • SICLOCK support • NTP-client • SNTP client 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
protocol / is supported	
<ul style="list-style-type: none"> • NTP • SNTP 	<p>Yes</p> <p>Yes</p>
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	
<ul style="list-style-type: none"> • for EMC interference emission • for immunity to EMC 	<p>EN 61000-6-4, EN 50121-4</p> <p>EN 61000-6-2, EN 50121-4</p>
certificate of suitability / RoHS conformity	Yes; 2011/65/EU
standards, specifications, approvals / hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> • ATEX • for ATEX / as marking • for ATEX / as certificate • IECEx • for IECEx / as marking • for IECEx / as certificate • CCC / for hazardous zone according to GB standard • for cULus HazLoc / as marking • for cULus HazLoc / as File Nr. • FM registration • for FM / as marking • for FM / as certificate 	<p>Yes; EN 60079-0, EN 60079-15</p> <p>II 3 G Ex nA II T4 Gc</p> <p>KEMA 07ATEX0145 X</p> <p>Yes; IEC 60079-0, IEC 60079-15</p> <p>Ex nA II T4 Gc</p> <p>IECEx DEK 14.0025X</p> <p>Yes</p> <p>CL1, DIV2, Group A,B,C,D T4, CL1, Zone 2, Group IIC, T4</p> <p>E240480 (NWHP, NWHP7)</p> <p>Yes; FM class 3600:2011, FM class 3611:2004, FM class 3810:2005, ANSI/ISA-61010-1:2004</p> <p>CL1, DIV2, group A,B,C,D T4, CL1, Zone 2, group IIC, T4 Ta: -40 °C +70 °C</p> <p>FM16US0205X</p>
standards, specifications, approvals / other	
certificate of suitability	
<ul style="list-style-type: none"> • railway application in accordance with EN 50121-4 • Regulatory Compliance Mark (RCM) • for UL 61010-2-201 / as File Nr. • for UL 60950-1 / as File Nr. • EAC approval 	<p>Yes</p> <p>Yes</p> <p>E85972 (NRAQ, NRAQ7)</p> <p>E115352 (NWGQ, NWGQ7)</p> <p>Yes</p>
standards, specifications, approvals / marine classification	
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • DNV GL • Korean Register of Shipping (KRS) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) • Royal Institution of Naval Architects (RINA) 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
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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