



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 • for signaling contact • for power supply	1 1 1
type of electrical connection • for operator console • for signaling contact • for power supply	RJ11 2-pole terminal block 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 • supply voltage / 1 / rated value • power loss [W] / 1 / rated value • consumed current / 1 / at rated supply voltage / maximum • supply voltage / 1 / rated value • consumed current / 1 / maximum • type of electrical connection / 1 / for power supply • product component / 1 / fusing at power supply input	DC 24 V 9 W 0.375 A 9.6 ... 31.2 V 0.75 A 4-pole terminal block 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 $\leq 0.3\text{ s}$	50
cascading in cases of star topology	any (depending only on signal propagation time)
product function / QoS according to DSCP	Yes
product feature	
<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
	Yes
	No
	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	
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