6GK5224-0BA00-2AC2

Data sheet



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

product type designation		
product brand name	SCALANCE	
product type designation	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		
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	
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	
fuse protection type / 1 / at input for supply voltage	2.5 A/ 125 V	
ambient conditions		
ambient temperature		
during operation	-40 +70 °C	
during storage	-40 +85 °C	

a during transport	-40 +85 °C
during transport relative humidity	
at 25 °C / without condensation / during operation /	95 %
maximum	95 76
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	
35 mm top hat DIN rail mounting	Yes
wall mounting	Yes
• S7-300 rail mounting	Yes
S7-1500 rail mounting	Yes
product features, product functions, product components / gene	eral
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	
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
switch-managed	Yes
PROFINET conformity class	В
telegram length / for Ethernet / maximum	1632 byte
protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• SFTP	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	Von
18M0 - device-specific information 18M1 - higher level designation/location designation	Yes
I&M1 - higher level designation/location designation product functions / diagnostics	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
number of VLANs / at ring redundancy (HRP; MRP; standby link)	257
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	100
	Yes
protocol / is supported / Media Redundancy Protocol (MRP) product function	100
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
of the PROFINET IO device / is supported / PROFINET system redundancy	Yes
 ring redundancy 	Yes
 high speed redundancy protocol (HRP) with redundancy manager 	Yes
 high speed redundancy protocol (HRP) with standby redundancy 	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
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
product functions / security	
product function	
• IEEE 802.1x (radius)	Yes
 RADIUS client 	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
standards, specifications, approvals	
certificate of suitability	
CE marking	Yes
Regulatory Compliance Mark (RCM)	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
 for safety / from CSA and UL 	UL 60950-1 E115352
standards, specifications, approvals / hazardous environments	
certificate of suitability	
• ATEX	Yes
• UKEX	Yes
• IECEx	Yes
ULhazloc approval	Yes
CCC / for hazardous zone according to GB standard	Yes
FM registration	Yes
standards, specifications, approvals / other	
certificate of suitability	
• railway application in accordance with EN 50121-4	Yes
RoHS conformity	Yes
resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes
IT security for industrial automation systems / according to IEC 62443-4-2:2019	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
standards, specifications, approvals / Environmental Product De	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	100
total	441.1 kg
	47.67 kg
during manufacturing during operation	47.67 kg 392.82 kg
during operation ofter and of life	
after end of life areduct functions / general	0.57 kg
product functions / general	
MTBF	41 a
reference code	
• according to IEC 81346-2	KF
• 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	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
 to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud
 to website: Industrial communication 	https://www.siemens.com/simatic-net
● to web page: SiePortal	https://sieportal.siemens.com/
to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://www.siemens.com/cax

security information

security information

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Approvals / Certificates

General Product Approval



Declaration of Conformity









General Product Approval

EMV

For use in hazardous locations

Declaration of Conformity





<u>KC</u>



IECEx



For use in hazardous locations

Marine / Shipping

<u>FM</u>

CCC-Ex









Marine / Shipping

Environment

Industrial Commu-

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Confirmation



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