SIEMENS

Data sheet **6GK5224-4GS00-2TC2**

SCALANCE XC224-4C G (E/IP) manageable Layer 2 IE switch; IEC 62443-4-2 certified; full Gigabit; 20x 10/100/1000 Mbps RJ45 ports; 4x 1000 Mbps combo ports (either 1000 Mbps/ SFPs or 10/100/1000 Mbps RJ45 ports can be used); 1x console port; diagnostics LED; redundant power supply; temperature range -40 °C to +70 °C; assembly: DIN rail/S7 mounting rail/wall; redundancy functions; Office features (RSTP, VLAN,...); PROFINET IO device; Ethernet/IP-compliant; C-plug slot; default EtherNet/IP; IEEE 1588v2 PTP

product type designation	SCALANCE XC224-4C G (E/IP def.)
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
interfaces / for communication / maximum configuration for modular devices	
number of electrical ports / maximum	24
number of optical ports / maximum	4
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 SFP plug-in transceiver or 100 Mbit/s via SCALANCE SFP991-1(LD) A
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	3-pole terminal block, permanently installed
design of the removable storage	
● C-PLUG	Yes
signal inputs/outputs	
operating voltage / of the signaling contacts	
● at DC / rated value	24 V
supply voltage, current consumption, power loss	
type of voltage / 1 / of the supply voltage	DC
● supply voltage / 1 / rated value	24 V
● power loss [W] / 1 / rated value	16.8 W
● consumed current / 1 / at rated supply voltage / maximum	0.7 A
● supply voltage / 1 / rated value	9.6 ... 31.2 V
● type of electrical connection / 1 / for power supply	3-pole terminal block, permanently installed
● product component / 1 / fusing at power supply input	Yes
● fuse protection type / 1 / at input for supply voltage	3.15 A / 125 V
ambient conditions	

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ambient temperature	
● during operation	-40 ... +70 °C
● during storage	-40 ... +85 °C
● during transport	-40 ... +85 °C
relative humidity	
● 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
fastening method	
● 35 mm top hat 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 <\~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
PROFINET conformity class	B
network load class / according to PROFINET	3
product function / switch-managed	Yes
telegram length / for Ethernet / maximum	10240 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
number of VLANs / at ring redundancy (HRP; MRP; standby link)	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	
● IEEE 1588 profile default	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	20 a
reference code	
● according to IEC 81346-2	KF
● according to IEC 81346-2:2019	KFE

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 50121-18
● 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	
● CCC / for hazardous zone according to GB standard	Yes
● CCC / for hazardous zone according to GB standard / as marking	Ex nA IIC T4 Gc

standards, specifications, approvals / marine classification

Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● Chinese Classification Society (CCS)	Yes
● DNV GL	Yes
● Korean Register of Shipping (KRS)	Yes
● Lloyds Register of Shipping (LRS)	Yes
● Polski Rejestr Statkow (PRS)	Yes
● Royal Institution of Naval Architects (RINA)	Yes

standards, specifications, approvals / Environmental Product Declaration

Environmental Product Declaration	Yes
● Global Warming Potential [CO2 eq] / total	339.9 kg
● Global Warming Potential [CO2 eq] / during manufacturing	57.33 kg
● Global Warming Potential [CO2 eq] / during operation	281.79 kg
● global warming potential [CO2 eq] / after end of life	0.76 kg

accessories

product extension / optional / C-PLUG	Yes

further information / internet links

internet link	
● to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool

security information

security information	Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly

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Approvals / Certificates

General Product Approval	EMC	For use in hazardous locations			
UL	RCM	ATEX-Zone 2-Declaration	IECEx	FM	CCC-Ex

Declaration of Conformity			Marine / Shipping		
CE EG-Konf.	Manufacturer Declaration	UKCA	ABS	BUREAU VERITAS	PRS

Marine / Shipping			other	
RINA	DNV·GL	KR	PROFINET-Certification	

last modified:	10/27/2023