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Data sheet 6GK5224-0BA00-2AC2



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	

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● 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	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 / 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
product function / switch-managed	Yes
telegram length / for Ethernet / maximum	1632 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	

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● 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

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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 / header	
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
● 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

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further information / internet-Links	
Internet-Link	
● to web page: selection aid TIA Selection Tool	http://www.siemens.com/snst
● to website: Industrial communication	http://www.siemens.com/simatic-net
● to website: Industry Mall	https://mall.industry.siemens.com
● to website: Information and Download Center	http://www.siemens.com/industry/infocenter
● to website: Image database	http://automation.siemens.com/bilddb
● to website: CAx-Download-Manager	http://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com

security information	
security information	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)

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