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Data sheet   **6GK5424-8TR00-2AC2**

SCALANCE XC416-8 managed Layer 3 IE switch, 16x 10/100/1000 Mbps RJ45, 8x 1/10 Gbps SFP+ port, LED diagnostics,error signaling contact with Select/set pushbutton, PROFINET IO Device, network management, redundancy functions, office features (RSTP, VLAN, IGMP,..) CLP included in scope of supply assembly: DIN rail/S7 mounting rail layer 3 integrated;

product type designation	SCALANCE
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10 Gbit/s
number of ports / maximum	24
interfaces / for communication / integrated	
number of electrical connections	
● for network components or terminal equipment	16; RJ45 with securing collar
number of 10/100/1000 Mbit/s RJ45 ports / integrated	
● with securing collar	16
number of electrical connections	
● for SFP+	8; 1000 Mbps and 10000 Mbps SFP usable
interfaces / other	
number of electrical connections	
● for operator console	1
● for signaling contact	1
● for power supply	2
type of electrical connection	
● for operator console	USB (2.0 Port, Type B, serial via USB)
● for signaling contact	2-pole terminal block
● for power supply	2 x 2-pin terminal block
design of the removable storage	
● CLP	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 supply / redundant power supply unit	No
type of voltage / 1 / of the supply voltage	DC
● supply voltage / 1 / rated value	24 V
● power loss [W] / 1 / rated value	43.2 W
● supply voltage / 1 / rated value	19.2 ... 28.8 V
● consumed current / 1 / maximum	1.8 A
● type of electrical connection / 1 / for power supply	2 x 2-pole terminal block
● product component / 1 / fusing at power supply input	Yes
ambient conditions	
ambient temperature	
● during operation	-40 ... +60 °C

9/6/2023

● during storage	-40 ... +85 °C
● during transport	-40 ... +85 °C
relative humidity	
● at 25 °C / without condensation / during operation / maximum	95 %
operating condition / fanless operation	Yes
protection class IP	IP20

design, dimensions and weights	
design	compact
width	210 mm
height	147 mm
depth	125 mm
net weight	1.8 kg
fastening method	
● 19-inch installation	No
● 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
number of automatically learnable MAC addresses	16382
number of QoS queues / per port	8
product function / QoS according to IEEE 802.1Q	Yes
product feature	
● 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
● 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	9194 byte
protocol / is supported	
● Telnet	Yes
● HTTP	Yes
● HTTPS	Yes
● TFTP	Yes
● FTP	Yes
● SFTP	Yes
● BOOTP	Yes
● NETCONF	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	

9/6/2023

● 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
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 / routing

service / routing / note	IP routing integrated
product function	
● static IP routing	Yes
● static IP routing IPv6	No
● dynamic IP routing	Yes
● dynamic IP routing IPv6	No
protocol / is supported	
● RIPv2	Yes
● RIPnG for IPv6	No
● OSPFv2	Yes
● OSPFv3 for IPv6	No
● VRRP	Yes
● VRRP for IPv6	No

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
● redundancy procedure STP	Yes
● redundancy procedure RSTP	Yes
● redundancy procedure RSTP+	Yes
● redundancy procedure MSTP	Yes
● passive listening	Yes
protocol / is supported	

9/6/2023

● LACP	Yes
product functions / security	
product function	
● ACL - MAC-based	Yes
● ACL - port/MAC-based	Yes
● 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
● IEEE 1588 v2 transparent forwarding	Yes
protocol / is supported	
● NTP	Yes
● SNTP	Yes
accuracy / at IEEE 1588 v2	
● not less than	100 µs
● typical	50 ns
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
standards, specifications, approvals	
standard	
● for safety / from CSA and UL	UL 60950-1; CSA C22.2 No. 213-M1987
● for emitted interference	EN 61000-6-4 (Class A)
● for interference immunity	EN 61000-6-2
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
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 / other	
certificate of suitability	EN 61000-6-2, EN 61000-6-4
● C-Tick	Yes
● KC approval	Yes
● E1 approval	No
● E1 approval	No
standards, specifications, approvals / marine classification	
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● French marine classification society (BV)	Yes
● Det Norske Veritas (DNV)	No
● Germanische Lloyd (GL)	No
● 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
further information / internet links	
internet link	

9/6/2023

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