## SIEMENS

## Data sheet

## 6GK5216-0BA00-2AC2



SCALANCE XC216 manageable Layer 2 IE switch; IEC 62443-4-2 certified; 16X 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	XC216	
transfer rate		
transfer rate	10 Mbit/s, 100 Mbit/s	
interfaces / for communication / integrated		
number of electrical connections		
<ul> <li>for network components or terminal equipment</li> </ul>	16; RJ45	
number of 10/100 Mbit/s RJ45 ports		
with securing collar	16	
interfaces / other		
number of electrical connections		
<ul> <li>for operator console</li> </ul>	1	
<ul> <li>for signaling contact</li> </ul>	1	
<ul> <li>for power supply</li> </ul>	1	
type of electrical connection		
<ul> <li>for operator console</li> </ul>	RJ11	
<ul> <li>for signaling contact</li> </ul>	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	
<ul> <li>supply voltage / 1 / rated value</li> </ul>	24 V	
<ul> <li>power loss [W] / 1 / rated value</li> </ul>	6.6 W	
<ul> <li>consumed current / 1 / at rated supply voltage / maximum</li> </ul>	0.275 A	
<ul> <li>supply voltage / 1 / rated value</li> </ul>	9.6 31.2 V	
<ul> <li>consumed current / 1 / maximum</li> </ul>	0.55 A	
<ul> <li>type of electrical connection / 1 / for power supply</li> </ul>	4-pole terminal block	
<ul> <li>product component / 1 / fusing at power supply input</li> </ul>	Yes	
<ul> <li>fuse protection type / 1 / at input for supply voltage</li> </ul>	2.5 A/ 125 V	
ambient conditions		
ambient temperature		
during operation	-40 +70 °C	
during storage	-40 +85 °C	

during transport	-40 +85 °C
relative humidity	
<ul> <li>at 25 °C / without condensation / during operation / maximum</li> </ul>	95 %
protection class IP	IP20
design, dimensions and weights	11 20
design	compact
width	120 mm
height	147 mm
depth	125 mm
net weight	0.8 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	
cascading in the case of a redundant ring / at reconfiguration	50
time of <\~0.3\~s	
cascading in cases of star topology	any (depending only on signal propagation time)
product function	
QoS according to DSCP	Yes
product feature	
<ul> <li>Cut Through switching method</li> </ul>	No
Store & Forward switching method	Yes
product functions / management, configuration, engineering	
product function	
• CLI	Yes
<ul> <li>web-based management</li> </ul>	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	B 1622 bits
telegram length / for Ethernet / maximum	1632 byte
protocol / is supported	Vac
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP • SFTP	Yes
• SFTP • BOOTP	Yes
• BOOTP • GMRP	Yes
• GMRP • DCP	Yes
• LLDP	Yes
EtherNet/IP	Yes
SNMP v1	Yes
• SNMP V1	Yes
• SNMP V2 • 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 functions / diagnostics	

product function	
<ul> <li>port diagnostics</li> </ul>	Yes
<ul> <li>statistics Packet Size</li> </ul>	Yes
<ul> <li>statistics packet type</li> </ul>	Yes
error statistics	Yes
• SysLog	Yes
product functions / VLAN	
product function	
<ul> <li>VLAN - port based</li> </ul>	Yes
<ul> <li>VLAN - protocol-based</li> </ul>	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	
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
<ul> <li>media redundancy protocol (MRP) with redundancy manager</li> </ul>	Yes
<ul> <li>Media Redundancy Protocol Interconnection (MRP-I)</li> </ul>	Yes
of the PROFINET IO device / is supported / H-Sync forwarding	Yes
<ul> <li>of the PROFINET IO device / is supported / PROFINET system redundancy</li> </ul>	Yes
<ul> <li>ring redundancy</li> </ul>	Yes
<ul> <li>high speed redundancy protocol (HRP) with redundancy manager</li> </ul>	Yes
<ul> <li>high speed redundancy protocol (HRP) with standby redundancy</li> </ul>	Yes
<ul> <li>redundancy procedure STP</li> </ul>	Yes
<ul> <li>redundancy procedure RSTP</li> </ul>	Yes
<ul> <li>redundancy procedure RSTP+</li> </ul>	Yes
<ul> <li>redundancy procedure MSTP</li> </ul>	Yes
Parallel Redundancy Protocol (PRP)/operation in the PRP-network	Yes
<ul> <li>Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)</li> </ul>	No
passive listening	Yes
protocol / is supported	
LACP	Yes
system modification during operation	Vee
product function / configuration in RUN via CiR/H-CiR	Yes
product functions / security	
product function	Vee
IEEE 802.1x (radius)     DADUUS aliant	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	165
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	
<ul> <li>for EMC interference emission</li> </ul>	EN 61000-6-4, EN 50121-4
<ul> <li>for immunity to EMC</li> </ul>	EN 61000-6-2, EN 50121-4
<ul> <li>for safety / from CSA and UL</li> </ul>	UL 60950-1 E115352
standards, specifications, approvals / hazardous environments	
certificate of suitability	
• ATEX	Yes
• UKEX	Yes
• IECEx	Yes
ULhazloc approval	Yes
<ul> <li>CCC / for hazardous zone according to GB standard</li> </ul>	Yes
FM registration	Yes
standards, specifications, approvals / other	
certificate of suitability	
<ul> <li>railway application in accordance with EN 50121-4</li> </ul>	Yes
RoHS conformity	Yes
IT security for industrial automation systems / according to IEC 62443-4-2:2019	Yes
standards, specifications, approvals / marine classification	
Marine classification association	
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	Yes
<ul> <li>French marine classification society (BV)</li> </ul>	Yes
• DNV GL	Yes
<ul> <li>Korean Register of Shipping (KRS)</li> </ul>	Yes
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	Yes
<ul> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	Yes
<ul> <li>Polski Rejestr Statkow (PRS)</li> </ul>	Yes
Royal Institution of Naval Architects (RINA)	Yes
standards, specifications, approvals / Environmental Product De	eclaration
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
• total	441.1 kg
during manufacturing	47.67 kg
during operation	392.82 kg
after end of life	0.57 kg
product functions / general	
MTBF	48 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; according to IEC 61406-1:2022
further information / internet links	
internet link	https://auspart.induate/.ejamore.com/as/vu//as/viau/400700050
• 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
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com

## security information

Approvals / Certificates

Siemens provides products and solutions with industrial cybersecurity 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 cybersecurity 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 cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

**General Product Approval** Declaration of Con-formity FHI **General Product Approval** EMV For use in hazardous locations <u>KC</u> Declaration of Conformity IECE For use in hazardous locations Marine / Shipping <u>FM</u> CCC-Ex 185 Industrial Commu-Marine / Shipping Environment nication NK / Nippon Kaiji Ky-**Confirmation** PROFINET okai 8/16/2024 🖸 last modified: