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Data sheet   **6GK5216-0HA00-2ES6**

SCALANCE XP216EEC, managed IE switch, with railway approval IEC 62443-4-2 certified; (EN 50155, EN45545); 12x 10/100 Mbit/s M12 ports, 4x 10/100/1000 Mbit/s M12 ports IP65, LED diagnostics, error signaling contact, redundant power supply, PROFINET IO device, network management, can be operated in redundant ring, incl. dust caps, including electronic manual on CD-ROM, C-PLUG optional.

product type designation	SCALANCE XP216EEC
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	16
interfaces / for communication / integrated	
number of electrical connections	
● for network components or terminal equipment	16
number of 10/100 Mbit/s M12-ports (D-coded) / integrated	12
number of 10/100/1000 Mbit/s M12-ports (X-coded) / integrated	4
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	5 pin M12 socket (A coded)
● for signaling contact	5-pin M12 connector (B-coded)
● for power supply	4-pin M12 plug (A-coded)
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; XP-200EEC with EN 50155 supports the voltage range 16.8 ... 30 V DC
● power loss [W] / 1 / rated value	8 W
● consumed current / 1 / at rated supply voltage / maximum	0.4 A
● supply voltage / 1 / rated value	19.2 ... 28.8 V
● consumed current / 1 / maximum	0.335 A
● type of electrical connection / 1 / for power supply	4-pin M12 plug (A-coded)
● product component / 1 / fusing at power supply input	Yes
ambient conditions	
ambient temperature	
● during operation	-40 ... +70 °C
● during storage	-40 ... +70 °C

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● during transport	-40 ... +70 °C
● note	EEC variants with EN 50155 support for 10 minutes: -40 °C ... +85 °C
relative humidity	
● at 25 °C / without condensation / during operation / maximum	95 %
protection class IP	IP65

design, dimensions and weights	
design	compact
width	280 mm
height	200 mm
depth	49 mm
net weight	2.5 kg
product feature / conformal coating	Yes
material / of the enclosure	Aluminum
fastening method	ET200pro module carrier
● wall 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 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
● with IRT / PROFINET IO switch	No
● PROFINET IO diagnosis	Yes
PROFINET conformity class	B
product function / switch-managed	Yes
telegram length / for Ethernet / maximum	1518 byte
protocol / is supported	
● Telnet	Yes
● HTTP	Yes
● HTTPS	Yes
● TFTP	Yes
● FTP	Yes
● BOOTP	No
● 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
● loopback diagnostics	Yes

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product functions / VLAN	
product function	
● VLAN - port based	Yes
● VLAN - protocol-based	No
● VLAN - IP-based	No
● VLAN dynamic	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	
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 RSTP	Yes
● redundancy procedure RSTP+	Yes
● redundancy procedure MSTP	Yes
● passive listening	Yes
product functions / security	
product function	
● RADIUS client	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
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
standards, specifications, approvals	
standard	
● for FM	FM3611: Class 1, Division 2, Group A, B, C, D / T4, CL.1, Zone 2, GP. IIC, T4, FM16US0205X
● for emitted interference	EN 61000-6-4 (Class A)
● for interference immunity	EN 61000-6-2
IT security for industrial automation systems / according to IEC 62443-4-2:2019	Yes
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
certificate of suitability / RoHS conformity	Yes

standards, specifications, approvals / hazardous environments	
standard / for hazardous zone	EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
● from CSA and UL	ANSI / ISA 12.12.01, CSA C22.2 No. 213-M1987, CL. 1 / Div. 2 / GP. A, B, C, D T4, CL. 1 / Zone 2 / GP. IIC, T4
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	
● C-Tick	Yes
● KC approval	Yes
● E1 approval	Yes
● E1 approval	Yes
● railway application in accordance with EN 50155	Yes
● railway application in accordance with EN 50124-1	Yes
● fire protection in accordance with EN 45545-2	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
● Polski Rejestr Statkow (PRS)	Yes

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
● 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, 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 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 Security RSS Feed under https://www.siemens.com/cert. (V4.6)

Approvals / Certificates		
General Product Approval	**EMC**	**For use in hazardous locations**

Manufacturer Declaration	UL	RCM	ATEX-Zone 2-Declaration	IECEx	FM

For use in hazardous locations	Declaration of Conformity				
CCC-Ex	CE EG-Konf.	EAC	UKCA	Manufacturer Declaration	Miscellaneous

Test Certificates		Marine / Shipping			
Type Test Certificates/Test Report	inspection certificate	ABS	BUREAU VERITAS	Lloyd's Register LRS	NK / Nippon Kaiji Kyokai

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

Environment

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