# **SIEMENS**

## Data sheet

# 6GK5216-0UA00-5ES6

SCALANCE XP216PoE EEC, managed IE switch, with railway approval (EN 50155, EN 45545); 12x 10/100 Mbps M12 ports, 4x 10/100/1000 Mbps M12 ports IP65, LED diagnostics, error signaling contact, Redundant power supply, PROFINET IO device, network management, operable in redundant ring, incl. dust caps, incl. electronic Manual on CD-ROM, C-plug optional



Product type designation	SCALANCE XP216PoE EEC
Transmission rate	
Transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
Interfaces / for communication / integrated	
Number of electrical connections	
<ul> <li>for network components or terminal equipment</li> </ul>	16
Number of 10/100 Mbit/s M12-ports (D-coded) / Integrated	6
• with PoE	6
Number of 10/100/1000 Mbit/s M12-ports (X-coded) / Integrated	2
• with PoE	2
Interfaces / others	
Number of electrical connections	
• for operator console	1
• for signaling contact	1
• for power supply	1
<ul> <li>for redundant voltage supply</li> </ul>	1

Type of electrical connection  • for operator console  • for signaling contact  • for power supply  design of the removable storage  • C-PLUG  gnal-Inputs/outputs  Operating voltage / of the signaling contacts  • at DC / Rated value  Operating current / of the signaling contacts  • at DC / maximum  upply voltage, current consumption, power loss  Type of voltage / of the supply voltage  Supply voltage  • external  • external / minimum  • external / maximum  Supply voltage / 1 / Rated value	5 pin M12 socket (A coded) 5-pin M12 connector (B-coded) 4-pin M12 plug (A-coded)  Yes  54 V  0.1 A  DC  54 V  46 V
for signaling contact         • for power supply  design of the removable storage         • C-PLUG  ignal-Inputs/outputs  Operating voltage / of the signaling contacts         • at DC / Rated value  Operating current / of the signaling contacts         • at DC / maximum  upply voltage, current consumption, power loss  Type of voltage / of the supply voltage  Supply voltage         • external         • external / minimum         • external / maximum  • external / maximum	5-pin M12 connector (B-coded) 4-pin M12 plug (A-coded)  Yes  54 V  0.1 A  DC  54 V  46 V
for power supply design of the removable storage         C-PLUG  gnal-Inputs/outputs  Operating voltage / of the signaling contacts	4-pin M12 plug (A-coded)  Yes  54 V  0.1 A  DC  54 V  46 V
design of the removable storage	Yes  54 V  0.1 A  DC  54 V  46 V
C-PLUG  Ignal-Inputs/outputs  Operating voltage / of the signaling contacts         • at DC / Rated value  Operating current / of the signaling contacts         • at DC / maximum  upply voltage, current consumption, power loss  Type of voltage / of the supply voltage  Supply voltage         • external         • external / minimum         • external / maximum	54 V 0.1 A DC 54 V 46 V
Ignal-Inputs/outputs  Operating voltage / of the signaling contacts  • at DC / Rated value  Operating current / of the signaling contacts  • at DC / maximum  upply voltage, current consumption, power loss  Type of voltage / of the supply voltage  Supply voltage  • external  • external / minimum  • external / maximum	54 V 0.1 A DC 54 V 46 V
Operating voltage / of the signaling contacts  • at DC / Rated value Operating current / of the signaling contacts  • at DC / maximum  upply voltage, current consumption, power loss Type of voltage / of the supply voltage  Supply voltage  • external  • external / minimum  • external / maximum	0.1 A  DC  54 V 46 V
at DC / Rated value  Departing current / of the signaling contacts  at DC / maximum  apply voltage, current consumption, power loss  Type of voltage / of the supply voltage  Supply voltage  external  external / minimum  external / maximum	0.1 A  DC  54 V 46 V
Operating current / of the signaling contacts  • at DC / maximum  upply voltage, current consumption, power loss  Type of voltage / of the supply voltage  Supply voltage  • external  • external / minimum  • external / maximum	0.1 A  DC  54 V 46 V
at DC / maximum  upply voltage, current consumption, power loss  Type of voltage / of the supply voltage  Supply voltage      external      external / minimum      external / maximum	DC 54 V 46 V
upply voltage, current consumption, power loss Type of voltage / of the supply voltage  Supply voltage  • external  • external / minimum  • external / maximum	DC 54 V 46 V
Fype of voltage / of the supply voltage  Supply voltage  • external  • external / minimum  • external / maximum	54 V 46 V
external     external / minimum     external / maximum	54 V 46 V
<ul> <li>external</li> <li>external / minimum</li> <li>external / maximum</li> </ul>	46 V
external / minimum     external / maximum	46 V
external / maximum	
Supply voltage / 1 / Rated value	57 V
Consumed current / 1 / at rated supply voltage / maximum	2.5 A
Power loss [W] / 1 / Rated value	13 W
Supply voltage / 2 / Rated value	with PoE consumers Type 1
Product component / fusing at power supply input	Yes
Consumed current / maximum	2.5 A
Power loss [W]	
• maximum	13 W
Supplied active power / of PSE / with PoE	
• per port / maximum	30 W
• total / maximum	120 W
ermitted ambient conditions	
Ambient temperature	
during operation	-40 +70 °C
during storage	-40 +70 °C
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	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
Mounting type	ET200pro module carrier
• wall mounting	Yes

Product properties, functions, components / general	
Cascading in the case of a redundant ring / at	50
reconfiguration time of <\~0.3\~s	
Cascading in cases of star topology	any (depending only on signal propagation time)

Product functions / management, configuration	
Product function	
• CLI	Yes
<ul><li>web-based management</li></ul>	Yes
MIB support	Yes
• TRAPs via email	Yes
<ul> <li>Configuration with STEP 7</li> </ul>	Yes
• RMON	Yes
Port mirroring	Yes
multiport mirroring	Yes
• CoS	Yes
• with IRT / PROFINET IO switch	No
PROFINET IO diagnosis	Yes
PROFINET conformity class	В
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
<ul> <li>I&amp;M1 – higher-level designation/location</li> </ul>	Yes
designation	
Product functions / Diagnosis	
Product function	
Port diagnostics	Yes
Statistics Packet Size	Yes
Statistics packet type	Yes
Error statistics	Yes
<ul><li>SysLog</li></ul>	Yes
<ul> <li>loopback diagnostics</li> </ul>	Yes
Product functions / VLAN	
Product function	
VLAN - port based	Yes
<ul> <li>VLAN - protocol-based</li> </ul>	No
VLAN - IP-based	No
<ul> <li>VLAN dynamic</li> </ul>	No
Number of VLANs / maximum	4094
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	
<ul> <li>of the PROFINET IO device / is supported / PROFINET system redundancy (S2)</li> </ul>	Yes
Ring redundancy	Yes
High Speed Redundancy Protocol (HRP)	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
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product function	

<ul> <li>media redundancy protocol (MRP) with redundancy manager</li> </ul>	Yes
• redundancy procedure RSTP	Yes
• redundancy procedure MSTP	Yes
Passive listening	Yes

Product functions / Security	
Product function	
<ul> <li>RADIUS client</li> </ul>	Yes
Protocol / is supported	
• SSH	Yes
• SSL	Yes

Product functions / Time	
Product function	
<ul> <li>SICLOCK support</li> </ul>	Yes
NTP-client	Yes
• SNTP client	Yes
Protocol / is supported	
• NTP	Yes
• SNTP	Yes

Standards, specifications, approvals	
Standard	
• for FM	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, CL.1, Zone 2, GP. IIC, T4
• for hazardous zone	EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
• for safety / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
• for hazardous zone / 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
• for emitted interference	EN 61000-6-4 (Class A)
<ul> <li>for interference immunity</li> </ul>	EN 61000-6-2

Standards, specifications, approvals / CE	
Certificate of suitability / CE marking	Yes
Certificate of suitability / RoHS conformity	Yes

Standards, specifications, approvals / miscellaneous	
Certificate of suitability	
• C-Tick	Yes
● E1 approval	Yes
● E1 approval	Yes
<ul> <li>Railway application in accordance with EN 50155</li> </ul>	Yes

 Railway application in accordance with EN 50124-1

Yes

• Fire protection in accordance with EN 45545-2

Yes

KC approval

Yes

### Accessories

Product extension / optional / C-PLUG

Yes

### Further Information / Internet Links

#### Internet-Link

• to website: Selector SIMATIC NET SELECTION TOOL

• to website: Industrial communication

• to website: Industry Mall

• to website: Information and Download Center

• to website: Image database

• to website: CAx Download Manager

• to website: Industry Online Support

http://www.siemens.com/snst

http://www.siemens.com/simatic-net

https://mall.industry.siemens.com

http://www.siemens.com/industry/infocenter

http://automation.siemens.com/bilddb

http://www.siemens.com/cax

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. Thirdparty 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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