## **SIEMENS**

## **Data sheet**



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		
<ul> <li>for network components or terminal equipment</li> </ul>	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	
<ul> <li>for signaling contact</li> </ul>	1	
<ul><li>for power supply</li></ul>	1	
type of electrical connection		
for operator console	5 pin M12 socket (A coded)	
<ul> <li>for signaling contact</li> </ul>	5-pin M12 connector (B-coded)	
<ul><li>for power supply</li></ul>	4-pin M12 plug (A-coded)	
design of the removable storage		
• C-PLUG	Yes	
signal inputs/outputs		
operating voltage / of the signaling contacts		
<ul><li>at DC / rated value</li></ul>	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; XP-200EEC with EN 50155 supports the voltage range 16.8 30 V DC	
<ul><li>power loss [W] / 1 / rated value</li></ul>	8 W	
<ul> <li>consumed current / 1 / at rated supply voltage / maximum</li> </ul>	0.4 A	
<ul><li>supply voltage / 1 / rated value</li></ul>	19.2 28.8 V	
<ul> <li>consumed current / 1 / maximum</li> </ul>	0.335 A	
<ul> <li>type of electrical connection / 1 / for power supply</li> </ul>	4-pin M12 plug (A-coded)	
<ul> <li>product component / 1 / fusing at power supply input</li> </ul>	Yes	
• fuse protection type / 1 / at input for supply voltage	5 A / 60 V	
ambient conditions		
ambient temperature		
<ul> <li>during operation</li> </ul>	-40 +70 °C	

during storage	-40 +70 °C
	-40 +70 °C
during transport     note	EEC variants with EN 50155 support for 10 minutes: -40 °C +85 °C
	EEC variants with EN 30133 support for 10 minutes40 °C +63 °C
relative humidity  • at 25 °C / without condensation / during operation /	95 %
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 / gener	ral
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 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	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
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	



<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
VLAN dynamic	No
number of VLANs / maximum	257
number of VLANs - dynamic / maximum	257
number of VLANs / at ring redundancy (HRP; MRP; standby	257
link)	
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</li> </ul>	Yes
• ring redundancy	Yes
<ul> <li>High Speed Redundancy Protocol (HRP)</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
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
<ul> <li>of the PROFINET IO device / is supported / H-Sync forwarding</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
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
02770 <sup>-</sup> 7-2.2010	



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
otalidara / for flazaradad zolid	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	
<ul> <li>CCC / for hazardous zone according to GB standard</li> </ul>	Yes; GB3836.1, GB3836.8
<ul> <li>CCC / for hazardous zone according to GB standard / as marking</li> </ul>	Ex nA IIC T4 Gc
standards, specifications, approvals / other	
certificate of suitability	
• C-Tick	Yes
<ul> <li>KC approval</li> </ul>	Yes
• E1 approval	Yes
● E1 approval	Yes
<ul> <li>railway application in accordance with EN 50155</li> </ul>	Yes
<ul> <li>railway application in accordance with EN 50124-1</li> </ul>	Yes
• fire protection in accordance with EN 45545-2	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
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: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
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
Approvals / Certificates	customer's exposure to cyber threats. To stay informed about product updates,





ATEX-Zone 2-Declara-<u>tion</u>



<u>FM</u>

For use in hazardous locations

**Declaration of Conformity** 

CCC-Ex





Manufacturer Declaration

**Miscellaneous** 

**Test Certificates** 

Marine / Shipping

Type Test Certificates/Test Report

inspection certificate







NK / Nippon Kaiji Ky-okai

Marine / Shipping







PROFINET-Certifica-<u>tion</u>

other

Confirmation

Railway

**Environment** 



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