

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



<b>Product type designation</b>	<b>SCALANCE XP216PoE EEC</b>
<b>Transfer rate</b>	
Transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
<b>Interfaces / for communication / Integrated</b>	
Number of electrical connections	
• for network components or terminal equipment	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
<b>Interfaces / other</b>	
Number of electrical connections	
• for operator console	1
• for signaling contact	1
• for power supply	1
• for redundant voltage supply	1

Type of electrical connection	<ul style="list-style-type: none"> <li>• for operator console</li> <li>• for signaling contact</li> <li>• for power supply</li> </ul>	5 pin M12 socket (A coded) 5-pin M12 connector (B-coded) 4-pin M12 plug (A-coded)
design of the removable storage	<ul style="list-style-type: none"> <li>• C-PLUG</li> </ul>	Yes

### Signal inputs/outputs

Operating voltage / of the signaling contacts	<ul style="list-style-type: none"> <li>• at DC / Rated value</li> </ul>	54 V
Operating current / of the signaling contacts	<ul style="list-style-type: none"> <li>• at DC / maximum</li> </ul>	0.1 A

### Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage	
<ul style="list-style-type: none"> <li>• external</li> <li>• external / minimum</li> <li>• external / maximum</li> </ul>	54 V 46 V 57 V
<b>Supply voltage / 1 / Rated value</b>	
<ul style="list-style-type: none"> <li>• Consumed current / 1 / at rated supply voltage / maximum</li> <li>• Power loss [W] / 1 / Rated value</li> </ul>	2.5 A 13 W
<b>Supply voltage / 2 / Rated value</b>	with PoE consumers Type 1
Product component / fusing at power supply input	Yes
Fuse protection type / at input for supply voltage	5 A / 60 V
Consumed current / maximum	2.5 A
Power loss [W]	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	13 W
Supplied active power / of PSE / with PoE	
<ul style="list-style-type: none"> <li>• per port / maximum</li> <li>• total / maximum</li> </ul>	30 W 120 W

### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• Note</li> </ul>	-40 ... +70 °C -40 ... +70 °C -40 ... +70 °C EEC variants with EN 50155 support for 10 minutes: -40 °C ... +85 °C
Relative humidity	
<ul style="list-style-type: none"> <li>• at 25 °C / without condensation / during operation / maximum</li> </ul>	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
Mounting type	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 <math>\sim 0.3\text{ s}</math>	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
<b>Identification &amp; maintenance function</b>	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

### Product functions / Diagnostics

<b>Product function</b>	
• Port diagnostics	Yes
• Statistics Packet Size	Yes
• Statistics packet type	Yes
• Error statistics	Yes
• SysLog	Yes
• loopback diagnostics	Yes

### Product functions / VLAN

<b>Product function</b>	
• VLAN - port based	Yes
• VLAN - protocol-based	No
• VLAN - IP-based	No
• VLAN dynamic	No
Number of VLANs / maximum	4094

### Product functions / DHCP

<b>Product function</b>	
• DHCP server	Yes
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	Yes
• DHCP Option 67	Yes

### Product functions / redundancy

<b>Product function</b>	
• of the PROFINET IO device / is supported / PROFINET system redundancy (S2)	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	
<ul style="list-style-type: none"> <li>• media redundancy protocol (MRP) with redundancy manager</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• of the PROFINET IO device / is supported / H-Sync forwarding</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• redundancy procedure RSTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• redundancy procedure MSTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Passive listening</li> </ul>	Yes

#### Product functions / Security

Product function	
<ul style="list-style-type: none"> <li>• RADIUS client</li> </ul>	Yes
Protocol / is supported	
<ul style="list-style-type: none"> <li>• SSH</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SSL</li> </ul>	Yes

#### Product functions / time

Product function	
<ul style="list-style-type: none"> <li>• SICLOCK support</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• NTP-client</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNTP client</li> </ul>	Yes
Protocol / is supported	
<ul style="list-style-type: none"> <li>• NTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNTP</li> </ul>	Yes

#### System modification during operation

Product function / configuration in RUN via CiR/H-CiR	Yes
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#### Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> <li>• for FM</li> </ul>	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, CL.1, Zone 2, GP. IIC, T4
<ul style="list-style-type: none"> <li>• for hazardous zone</li> </ul>	EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
<ul style="list-style-type: none"> <li>• for safety / from CSA and UL</li> </ul>	UL 60950-1, CSA C22.2 No. 60950-1
<ul style="list-style-type: none"> <li>• for hazardous zone / from CSA and UL</li> </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
<ul style="list-style-type: none"> <li>• for emitted interference</li> </ul>	EN 61000-6-4 (Class A)
<ul style="list-style-type: none"> <li>• for interference immunity</li> </ul>	EN 61000-6-2
Security for industrial automation and control systems / acc. to IEC 62443-4-2:2019	Yes

#### Standards, specifications, approvals / CE

Certificate of suitability / CE marking	Yes
Certificate of suitability / RoHS conformity	Yes

## Standards, specifications, approvals / other

### Certificate of suitability

- |   |     |
|---|-----|
| • C-Tick  | 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 |
| • KC approval                                       | Yes |

## accessories

- |                                       |     |
|---------------------------------------|-----|
| Product extension / optional / C-PLUG | Yes |
|---------------------------------------|-----|

## Further information / Internet-Links

### Internet-Link

- |   |   |
|---|---|
| • to website: Selector SIMATIC NET SELECTION TOOL | <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>                               |
| • to website: Industrial communication            | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>                 |
| • to website: Industry Mall                       | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>                   |
| • to website: Information and Download Center     | <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> |
| • to website: Image database                      | <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>             |
| • to website: CAx Download Manager                | <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                 |
| • to website: Industry Online Support             | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>             |

## 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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