

**Product-type designation**

**SCALANCE X224**



SCALANCE X224, MANAGED IE SWITCH,  
 24 X 10/100MBIT/S RJ45 PORTS,  
 LED DIAGNOSTICS,  
 FAULT SIGNAL. CONTACT WITH SET BUTTON  
 REDUNDANT POWER SUPPLY,  
 PROFINET-IO DEVICE,  
 NETWORK- MANAGEMENT, OPERATION IN RING,  
 INCL. ELECTRONIC MANUAL ON CD,  
 C-PLUG OPTIONAL

**Transmission rate**

Transfer rate / 1	10 Mbit/s
Transfer rate / 2	100 Mbit/s

**Interfaces**

Number of electrical/optical connections	
<ul style="list-style-type: none"> <li>• for network components or terminal equipment / maximum</li> </ul>	24
Number of electrical connections	
<ul style="list-style-type: none"> <li>• for network components and terminal equipment</li> <li>• for alarm contact</li> <li>• for power supply</li> <li>• for redundant power supply</li> </ul>	24 1 1 1
Design of electrical connection	
<ul style="list-style-type: none"> <li>• for network components and terminal equipment</li> <li>• for signaling contact</li> <li>• for power supply</li> </ul>	RJ45 port 2-pole terminal block 4-pole terminal block
design of the removable storage / C-PLUG	Yes

**Inputs/outputs**

Operating voltage / of signaling contacts / at DC / rated value	24 V
Operating current / of signaling contacts / at DC / maximum	0.1 A

**Supply voltage, current consumption, power loss**

Type of voltage / of supply voltage	DC
Supply voltage / external	24 V
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	18 V
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	32 V
Product component / fusing at power supply input	Yes
Consumed current / maximum	0.35 A
Active power loss / at 24 V / for DC	8.4 W
<b>Permitted ambient conditions</b>	
Ambient temperature	
<ul style="list-style-type: none"> <li>• during operating</li> </ul>	-40 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operating / maximum	95 %
Protection class IP	IP30
<b>Design, dimensions and weight</b>	
Design	compact
Width	180 mm
Height	125 mm
Depth	124 mm
Net weight	1.6 kg
Type of mounting	
<ul style="list-style-type: none"> <li>• 35 mm DIN rail mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• wall mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7-300 rail mounting</li> </ul>	Yes
<b>Product properties, functions, components / general</b>	
Cascading in the case of a redundant ring / at reconfiguration time of <math>\leq 0.3\text{ s}</math>	50
Cascading in cases of star structuring	Any (depending only on signal propagation time)
Product function	
<ul style="list-style-type: none"> <li>• CLI</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• web-based management</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• MIB support</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TRAPs via email</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Configuration with STEP 7</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Port mirroring</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• for IRT / PROFINET IO switch</li> </ul>	No
<ul style="list-style-type: none"> <li>• PROFINET IO diagnosis</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• switch-managed</li> </ul>	Yes
Protocol / is supported	

• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• BOOTP	No
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	Yes
Identification & maintenance	
• I&M0 - device-specific information	Yes
• I&M1 - plant identification/location name	Yes
<b>Product functions / Diagnosis</b>	
Product function	
• Port diagnostics	Yes
• Statistics Packet Size	Yes
• Statistics packet type	Yes
• Error statistics	Yes
<b>Product functions / DHCP</b>	
Product function / DHCP client	Yes
<b>Product functions / Redundancy</b>	
Product function	
• Ring redundancy	Yes
• Redundancy manager	Yes
• Standby redundancy	No
• HSR redundancy protocol	Yes
• MRP redundancy protocol	Yes
• redundancy procedure PRP	No
• Passive listening	Yes
Protocol / is supported / PRP	Yes
<b>Product functions / Security</b>	
Protocol / is supported / SSH	Yes
<b>Product functions / Time</b>	
Product function / SICLOCK support	Yes
Protocol / is supported	
• NTP	No
• SNTP	Yes

## Standards, specifications, approvals

### Standard

- for EMC / from FM  
FM3611: Class 1, Division 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 / of CSA and UL  
UL 60950-1, CSA C22.2 No. 60950-1
- for hazardous area / of 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 61000-6-4:2001 (Class A)
- for interference immunity  
EN 61000-6-2:2001

### Verification of suitability

- CE mark  
Yes
- C-Tick  
Yes
- KC approval  
Yes
- Railway application in accordance with EN 50155  
No
- Railway application in accordance with EN 50124-1  
No

### Marine classification association

- American Bureau of Shipping Europe Ltd. (ABS)  
Yes
- Bureau Veritas (BV)  
Yes
- Det Norske Veritas (DNV)  
Yes
- Germanische Lloyd (GL)  
Yes
- Lloyds Register of Shipping (LRS)  
Yes
- Nippon Kaiji Kyokai (NK)  
Yes
- Polski Rejestr Statkow (PRS)  
No

### letzte Änderung:

May 14, 2012