



SCALANCE XC224-4C G EEC managed Layer 2 IE switch; IEC 62443-4-2 certified; Full Gigabit; 20x 10/100/1000 Mbps RJ45 ports; 4x 1000 Mbps combo ports (either 1000 Mbps/ SFPs or 10/100/1000 Mbps RJ45 ports can be used); 1x console port; diagnostics LED; redundant power supply; with painted printed circuit boards NAMUR NE21-compliant; temp. range -40 °C to +70 °C; mounting: DIN rail/S7 mounting rail/wall; redundancy functions; Office features (RSTP, VLAN,...); PROFINET IO device; Ethernet/IP-compliant;

<b>Product type designation</b>	<b>SCALANCE XC224-4C G 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	24; RJ45
Number of 10/100/1000 Mbit/s RJ45 ports / Integrated	24
Number of combo ports / with RJ45 interface for optical plug-in transceiver	4; 1000 Mbit/s SFPs
<b>Interfaces / for communication / plug-in</b>	
Number of electrical connections • for SFP	4; 1000 Mbit/s
<b>Interfaces / other</b>	
Number of electrical connections • for operator console	1
• for signaling contact	1
• for power supply	1

<ul style="list-style-type: none"> <li>• for redundant voltage supply</li> </ul>	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>	RJ11 2-pole terminal block 3-pole terminal block, permanently installed
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>	24 V

### 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>	24 V 9.6 V 31.2 V
<b>Supply voltage / 4 / Rated value</b>	
<ul style="list-style-type: none"> <li>• Consumed current / 4 / at rated supply voltage / maximum</li> </ul>	0.7 A
Product component / fusing at power supply input	Yes
Fuse protection type / at input for supply voltage	3.15 A / 125 V
Power loss [W]	
<ul style="list-style-type: none"> <li>• at DC / at 24 V</li> </ul>	16.8 W

### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-40 ... +70 °C -40 ... +85 °C -40 ... +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	IP20

### Design, dimensions and weights

Design	compact
Width	140 mm
Height	150 mm
Depth	125 mm
Net weight	1.3 kg
Product feature / conformal coating	Yes
Material / of the enclosure	Polycarbonate (PC-GF10) / pressure die cast aluminum
Mounting type	

• 35 mm DIN rail mounting	Yes
• wall mounting	No
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes

#### Product features, product functions, product components / general

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 topology	any (depending only on signal propagation time)
Product function / QoS according to DSCP	Yes
Product feature	
• Cut Through switching method	No
• Store & Forward switching method	Yes

#### 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
• SMTP server	No
• Port mirroring	Yes
• multiport mirroring	Yes
• CoS	Yes
• PROFINET IO diagnosis	Yes
PROFINET conformity class	B
Product function / switch-managed	Yes
Telegram length / for Ethernet / maximum	1632 byte
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• BOOTP	No
• GMRP	Yes
• DCP	Yes
• LLDP	Yes
• EtherNet/IP	Yes
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes

<ul style="list-style-type: none"> <li>• IGMP (snooping/querier)</li> </ul>	Yes
Identification & maintenance function	
<ul style="list-style-type: none"> <li>• I&amp;M0 - device-specific information</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• I&amp;M1 – higher-level designation/location designation</li> </ul>	Yes

### Product functions / Diagnostics

Product function	
<ul style="list-style-type: none"> <li>• Port diagnostics</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Statistics Packet Size</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Statistics packet type</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Error statistics</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SysLog</li> </ul>	Yes

### Product functions / VLAN

Product function	
<ul style="list-style-type: none"> <li>• VLAN - port based</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• VLAN - protocol-based</li> </ul>	No
<ul style="list-style-type: none"> <li>• VLAN - IP-based</li> </ul>	No
Number of VLANs / maximum	257
Number of VLANs - dynamic / maximum	257
Protocol / is supported / GVRP	Yes

### Product functions / DHCP

Product function	
<ul style="list-style-type: none"> <li>• DHCP server</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DHCP client</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DHCP Option 82</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DHCP Option 66</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DHCP Option 67</li> </ul>	Yes

### Product functions / redundancy

Product function	
<ul style="list-style-type: none"> <li>• of the PROFINET IO device / is supported / PROFINET system redundancy (S2)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Ring redundancy</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• High Speed Redundancy Protocol (HRP)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• high speed redundancy protocol (HRP) with redundancy manager</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• high speed redundancy protocol (HRP) with standby redundancy</li> </ul>	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 STP</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>• Parallel Redundancy Protocol (PRP)/operation in the PRP-network</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Passive listening</li> </ul>	Yes
Protocol / is supported	
<ul style="list-style-type: none"> <li>• LACP</li> </ul>	Yes

### Product functions / Security

Product function	
<ul style="list-style-type: none"> <li>• IEEE 802.1x (radius)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Broadcast/Multicast/Unicast Limiter</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• broadcast blocking</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

Security for industrial automation and control systems / acc. to IEC 62443-4-2:2019	Yes
MTBF	20 y

### Standards, specifications, approvals / CE

Certificate of suitability / CE marking	Yes
Product conformity / according to EMC-guideline	2014/30/EU
Standard	

- for EMC interference emission

EN 61000-6-4, EN 50121-17

- for immunity to EMI

EN 61000-6-2, EN 50121-17

Certificate of suitability / RoHS conformity

Yes; 2011/65/EU

**last modified:**

05/19/2020