

### Product-type designation

### SCALANCE XR324-4M EEC



SCALANCE XR324-4M EEC;  
MANAGED IE SWITCH, 19" RACK;  
POWER SUPPLY WITH 1 X 24V DC;  
PORTS FRONT SIDE;  
16 X 10/100/1000MBIT/S RJ45 PORTS ELECTRICAL;  
4 X 100/1000MBIT/S FOR 2-PORT- MEDIA MODULES,  
ELECTRICAL OR OPTICAL;  
LED DIAGNOSTICS;  
FAULT SIGNAL CONTACT;  
WITH SELECT/SET-BUTTON;  
PROFINET-IO DEVICE,  
NETWORK- MANAGEMENT;  
INTEGRATED REDUNDANCY MANAGER

### Transmission rate

|                   |             |
|-------------------|-------------|
| Transfer rate / 1 | 10 Mbit/s   |
| Transfer rate / 2 | 100 Mbit/s  |
| Transfer rate / 3 | 1000 Mbit/s |

### Interfaces

Number of electrical/optical connections / for network components or terminal equipment / maximum

24

Number of electrical connections

|                                                 |    |
|-------------------------------------------------|----|
| • for network components and terminal equipment | 16 |
| • for operator console                          | 1  |
| • for signaling contact                         | 1  |
| • for media module                              | 4  |
| • for power supply                              | 1  |
| • for redundant power supply                    | 1  |

Design of electrical connection

|                                                 |                       |
|-------------------------------------------------|-----------------------|
| • for network components and terminal equipment | RJ45 port             |
| • for operator console                          | RJ11 port             |
| • for signaling contact                         | 2-pole terminal block |
| • for power supply                              | 4-pole terminal block |

Design of optical interface / for optical waveguide

|                                                                                                                  |                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 100 Mbit/s</li> </ul>                                                | Dependent on selected media modules                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>• at 1000 Mbit/s</li> </ul>                                               | Dependent on selected media modules                                                                                                                                                                 |
| design of the removable storage / C-PLUG                                                                         | Yes                                                                                                                                                                                                 |
| <b>Signal-Inputs/outputs</b>                                                                                     |                                                                                                                                                                                                     |
| Operating voltage / of signaling contacts / at DC / rated value                                                  | 24 V                                                                                                                                                                                                |
| Operating current / of signaling contacts / at DC / maximum                                                      | 0.1 A                                                                                                                                                                                               |
| <b>Supply voltage, current consumption, power loss</b>                                                           |                                                                                                                                                                                                     |
| Type of supply voltage / redundant power supply unit                                                             | No                                                                                                                                                                                                  |
| Type of / supply voltage                                                                                         | DC                                                                                                                                                                                                  |
| Supply voltage                                                                                                   |                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• external</li> </ul>                                                     | 24 V                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• external</li> </ul>                                                     | 19.2 ... 57.6 V                                                                                                                                                                                     |
| Type / 2 / of supply voltage                                                                                     | DC                                                                                                                                                                                                  |
| Supply voltage / for DC                                                                                          | 24 V                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• rated value</li> </ul>                                                  | 19.2 ... 57.6 V                                                                                                                                                                                     |
| Product component / fusing at power supply input                                                                 | Yes                                                                                                                                                                                                 |
| Type of fusing / at input for supply voltage                                                                     | T2H / 250 V                                                                                                                                                                                         |
| Consumed current / maximum                                                                                       | 1.6 A                                                                                                                                                                                               |
| Power loss                                                                                                       |                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 24 V / for DC</li> </ul>                                             | 40 W                                                                                                                                                                                                |
| <b>Permitted ambient conditions</b>                                                                              |                                                                                                                                                                                                     |
| Ambient temperature                                                                                              |                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• during operating</li> </ul>                                             | -40 ... +70 °C                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• during storage</li> </ul>                                               | -40 ... +85 °C                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• during transport</li> </ul>                                             | -40 ... +85 °C                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• Comment</li> </ul>                                                      | Extended temperature upper limit of +85° C permitted for 16 hours. Reduced operating temperature through the use of media modules (-40 °C to +70 °C) or SFP plug-in transceivers (-40 °C to +60 °C) |
| Relative humidity                                                                                                |                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 25 °C / without condensation / during operating / maximum</li> </ul> | 95 %                                                                                                                                                                                                |
| Protection class IP                                                                                              | IP20                                                                                                                                                                                                |
| <b>Design, dimensions and weight</b>                                                                             |                                                                                                                                                                                                     |
| Design                                                                                                           | 19" rack                                                                                                                                                                                            |
| Width                                                                                                            | 483 mm                                                                                                                                                                                              |
| Height                                                                                                           | 44 mm                                                                                                                                                                                               |
| Depth                                                                                                            | 305 mm                                                                                                                                                                                              |
| Net weight                                                                                                       | 6.5 kg                                                                                                                                                                                              |
| Mounting type                                                                                                    |                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• 19-inch installation</li> </ul>                                         | Yes                                                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>• 35 mm DIN rail mounting</li> </ul>                                      | No                                                                                                                                                                                                  |

|                                                                                |                                                                                      |
|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| • wall mounting                                                                | No                                                                                   |
| • S7-300 rail mounting                                                         | No                                                                                   |
| Mounting type                                                                  | When used in shipbuilding, the device must be secured in the 19" rack at four points |
| <b>Product properties, functions, components / general</b>                     |                                                                                      |
| Cascading in the case of a redundant ring / at reconfiguration time of <1-0.3s | 50                                                                                   |
| Cascading in cases of star structuring                                         | Any (depending only on signal propagation time)                                      |
| 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                                                                                  |
| • PROFINET IO diagnosis                                                        | Yes                                                                                  |
| • switch-managed                                                               | Yes                                                                                  |
| Protocol / is supported                                                        |                                                                                      |
| • Telnet                                                                       | Yes                                                                                  |
| • HTTP                                                                         | Yes                                                                                  |
| • HTTPS                                                                        | Yes                                                                                  |
| • TFTP                                                                         | Yes                                                                                  |
| • FTP                                                                          | Yes                                                                                  |
| • BOOTP                                                                        | Yes                                                                                  |
| • SNMP v1                                                                      | Yes                                                                                  |
| • SNMP v2                                                                      | Yes                                                                                  |
| • SNMP v3                                                                      | Yes                                                                                  |
| • IGMP (snooping/querier)                                                      | Yes                                                                                  |
| • GMRP                                                                         | Yes                                                                                  |
| • DCP                                                                          | Yes                                                                                  |
| • LLDP                                                                         | Yes                                                                                  |
| Identification & maintenance function                                          |                                                                                      |
| • I&M0 - device-specific information                                           | Yes                                                                                  |
| • I&M1 – higher level designation/location designation                         | Yes                                                                                  |
| <b>Product functions / Diagnosis</b>                                           |                                                                                      |
| Product function                                                               |                                                                                      |
| • Port diagnostics                                                             | Yes                                                                                  |

|                                        |     |
|----------------------------------------|-----|
| • Statistics Packet Size               | Yes |
| • Statistics packet type               | Yes |
| • Error statistics                     | Yes |
| • SysLog                               | Yes |
| <b>Product functions / VLAN</b>        |     |
| Product function                       |     |
| • VLAN - port based                    | Yes |
| • VLAN dynamic                         | Yes |
| Number of VLANs / maximum              | 255 |
| Number of VLANs - dynamic / maximum    | 255 |
| Protocol / is supported / GVRP         | Yes |
| <b>Product functions / DHCP</b>        |     |
| Product function                       |     |
| • DHCP client                          | Yes |
| • DHCP Option 82                       | Yes |
| • DHCP Option 66                       | Yes |
| • DHCP Option 67                       | Yes |
| <b>Product functions / Redundancy</b>  |     |
| Product function                       |     |
| • Ring redundancy                      | Yes |
| • Redundancy manager                   | Yes |
| • Standby redundancy                   | Yes |
| • High Speed Redundancy Protocol (HRP) | Yes |
| • Media Redundancy Protocol (MRP)      | Yes |
| • redundancy procedure STP             | Yes |
| • redundancy procedure RSTP            | Yes |
| • redundancy procedure MSTP            | Yes |
| • Passive listening                    | Yes |
| Protocol / is supported                |     |
| • STP/RSTP                             | Yes |
| • STP                                  | Yes |
| • RSTP                                 | Yes |
| • RSTP big network support             | Yes |
| • LACP                                 | Yes |
| <b>Product functions / Security</b>    |     |
| Product function                       |     |
| • ACL - port/MAC-based                 | Yes |
| • IEEE 802.1X (radius)                 | Yes |
| • Broadcast/Multicast/Unicast Limiter  | Yes |

|                                               |                                                                                                                |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| • broadcast blocking                          | Yes                                                                                                            |
| Protocol / is supported / SSH                 | Yes                                                                                                            |
| <b>Product functions / Time</b>               |                                                                                                                |
| Product function / SICLOCK support            | Yes                                                                                                            |
| Protocol / is supported                       |                                                                                                                |
| • NTP                                         | Yes                                                                                                            |
| • SNTP                                        | Yes                                                                                                            |
| • MSTP                                        | No                                                                                                             |
| • IEEE 1588 profile default                   | Yes                                                                                                            |
| <b>Standards, specifications, approvals</b>   |                                                                                                                |
| Standard                                      |                                                                                                                |
| • for EMC                                     | IEC 61850, IEEE 1613                                                                                           |
| • from FM                                     | FM3611: Class 1, Division 2, Group A, B, C, D / T4, Class 1, Zone 2, Group 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. 60950-1-03                                                                           |
| • for hazardous area / of CSA and UL          | ANSI / ISA 12.12.01, CSA C22.2 No. 142-M1987, CL. 1 / Div. 2 / GP. A, B, C, D T4, CL. 1 / Zone 2 / GP. IIC, T4 |
| • for emitted interference                    | EN 61000-6-4:2007 (Class A)                                                                                    |
| • for interference immunity                   | EN 61000-6-2:2005                                                                                              |
| Verification of suitability                   | EN 61000-6-2:2005, EN 61000-6-4:2007                                                                           |
| • CE mark                                     | Yes                                                                                                            |
| • C-Tick                                      | Yes                                                                                                            |
| • KC approval                                 | Yes                                                                                                            |
| • IEC 61850-3                                 | Yes                                                                                                            |
| <b>Further Information / Internet Links</b>   |                                                                                                                |
| Internet-Link                                 |                                                                                                                |
| • to website: Industry Mall                   | <a href="http://www.siemens.com/industrial-controls/mall">http://www.siemens.com/industrial-controls/mall</a>  |
| • to website: Industrial communication        | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>                            |
| • to website: Information and Download Center | <a href="http://www.siemens.com/automation/net/catalog">http://www.siemens.com/automation/net/catalog</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="http://support.automation.siemens.com">http://support.automation.siemens.com</a>                      |
| <b>letzte Änderung:</b>                       | Aug 6, 2014                                                                                                    |