## **SIEMENS**

## **Data sheet**

## 6GK5324-0GG10-1AR2

SCALANCE XR324-12M; managed IE switch, 19" rack; 12x 100/1000 Mbit/s 2-port media modules, electrical or optical; LED diagnostics; error signaling Contact; Select/set pushbutton, PROFINET IO device, network management, Integrated redundancy manager, office features (RSTP, VLAN, IGMP,..) C-PLUG in scope of supply; Power supply 24 V DC; Ports in the front.



| product type designation   | SCALANCE XR324-12M                 |  |
|--|------------------------------------|--|
| transfer rate  |                                    |  |
| transfer rate  | 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s |  |
| interfaces / for communication / maximum configuration for mod           | dular devices                      |  |
| number of electrical ports / maximum                                     | 24                                 |  |
| number of optical ports / maximum  | 24                                 |  |
| interfaces / for communication / integrated                              |                                    |  |
| number of 100 Mbit/s ST(BFOC) ports                                      |                                    |  |
| • for multimode  | 24                                 |  |
| number of 100 Mbit/s SC ports  |                                    |  |
| • for multimode  | 24                                 |  |
| number of 1000 Mbit/s LC ports   |                                    |  |
| • for multimode  | 24                                 |  |
| • for single mode (LD)   | 24                                 |  |
| interfaces / other   |                                    |  |
| number of electrical connections   |                                    |  |
| for operator console   | 1                                  |  |
| for signaling contact  | 1                                  |  |
| • for media module   | 12                                 |  |
| <ul><li>for power supply</li></ul>                                       | 1                                  |  |
| type of electrical connection  |                                    |  |
| <ul> <li>for operator console</li> </ul>                                 | RJ11                               |  |
| <ul> <li>for signaling contact</li> </ul>                                | 2-pole terminal block              |  |
| • for power supply   | 4-pole terminal block              |  |
| design of the removable storage  |                                    |  |
| • C-PLUG   | Yes                                |  |
| signal inputs/outputs  |                                    |  |
| operating voltage / of the signaling contacts                            |                                    |  |
| at DC / rated value  | 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 supply / redundant power supply unit                     | No                                 |  |
| type of voltage / 1 / of the supply voltage                              | DC                                 |  |
| <ul><li>supply voltage / 1 / rated value</li></ul>                       | 24 V                               |  |
| • power loss [W] / 1 / rated value                                       | 44 W                               |  |
| <ul><li>supply voltage / 1 / rated value</li></ul>                       | 19.2 28.8 V                        |  |
| <ul><li>consumed current / 1 / maximum</li></ul>                         | 1.8 A                              |  |
| <ul> <li>type of electrical connection / 1 / for power supply</li> </ul> | 4-pole terminal block              |  |

| <ul> <li>product component / 1 / fusing at power supply input</li> </ul>  | Yes  |
|---|--|
| ambient conditions  |  |
| ambient temperature   |  |
| during operation  | -40 +70 °C   |
|   | -40 +85 °C   |
| during storage  | -40 +85 °C   |
| during transport  |  |
| • note  | Reduced operating temperature through the use of media modules (-40 $^{\circ}$ C to +70 $^{\circ}$ C) or SFP plug-in transceivers (-40 $^{\circ}$ C to +60 $^{\circ}$ C). If the device is installed in the vertical position, the maximum operating temperature is reduced to +50 $^{\circ}$ C. |
| relative humidity   |  |
| at 25 °C / without condensation / during operation /<br>maximum   | 95 %   |
| protection class IP   | IP20   |
| design, dimensions and weights  |  |
| design  | 19" rack   |
| number of modular height units / relating to 19-inch cabinet  | 1  |
| width   | 483 mm   |
| height  | 44 mm  |
| depth   | 305 mm   |
| net weight  | 5.5 kg   |
| product feature / conformal coating   | No   |
| fastening method  | When used in shipbuilding, the device must be secured in the 19" rack at four points   |
| • 19-inch installation  | Yes  |
| 35 mm top hat DIN rail mounting   | No   |
| wall mounting   | No   |
| S7-300 rail mounting  | No   |
| S7-1500 rail mounting   | No   |
| product features, product functions, product components / gene  |  |
| cascading in the case of a redundant ring / at reconfiguration  | 100  |
|   | 100  |
| time of <\~0.3\~s   |  |
| cascading in cases of star topology   | any (depending only on signal propagation time)  |
| cascading in cases of star topology product functions / management, configuration, engineering  | any (depending only on signal propagation time)  |
| cascading in cases of star topology   | any (depending only on signal propagation time)  |
| cascading in cases of star topology product functions / management, configuration, engineering  | any (depending only on signal propagation time)  Yes   |
| cascading in cases of star topology product functions / management, configuration, engineering product function   |  |
| cascading in cases of star topology product functions / management, configuration, engineering product function • CLI   | Yes  |
| cascading in cases of star topology product functions / management, configuration, engineering product function • CLI • web-based management  | Yes<br>Yes   |
| cascading in cases of star topology product functions / management, configuration, engineering product function • CLI • web-based management • MIB support  | Yes<br>Yes<br>Yes  |
| cascading in cases of star topology product functions / management, configuration, engineering product function  • CLI • web-based management • MIB support • TRAPs via email   | Yes<br>Yes<br>Yes  |
| cascading in cases of star topology product functions / management, configuration, engineering product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7   | Yes Yes Yes Yes Yes Yes  |
| cascading in cases of star topology product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  | Yes Yes Yes Yes Yes Yes Yes  |
| cascading in cases of star topology product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  | Yes Yes Yes Yes Yes Yes Yes Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  | Yes  |
| cascading in cases of star topology product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • port mirroring • multiport mirroring • CoS  | Yes  |
| cascading in cases of star topology product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis  | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  • CoS  • PROFINET IO diagnosis  PROFINET conformity class   | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  • CoS  • PROFINET IO diagnosis  PROFINET conformity class  product function / switch-managed  | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  • CoS  • PROFINET IO diagnosis  PROFINET conformity class  product function / switch-managed  protocol / is supported   | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  • CoS  • PROFINET IO diagnosis  PROFINET conformity class  product function / switch-managed  protocol / is supported  • Telnet  • HTTP   | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  • CoS  • PROFINET IO diagnosis  PROFINET conformity class  product function / switch-managed  protocol / is supported  • Telnet  • HTTP  • HTTPS  | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  • CoS  • PROFINET IO diagnosis  PROFINET conformity class  product function / switch-managed  protocol / is supported  • Telnet  • HTTP  • HTTPS  • TFTP  | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function   | Yes  |
| cascading in cases of star topology product functions / management, configuration, engineering  product function  | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function   | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  • CoS  • PROFINET IO diagnosis  PROFINET conformity class  product function / switch-managed  protocol / is supported  • Telnet  • HTTP  • HTTPS  • TFTP  • FTP  • BOOTP  • GMRP  • DCP                                   | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function   | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function   | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function   | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function  • CLI  • web-based management  • MIB support  • TRAPs via email  • configuration with STEP 7  • RMON  • port mirroring  • multiport mirroring  • CoS  • PROFINET IO diagnosis  PROFINET conformity class  product function / switch-managed  protocol / is supported  • Telnet  • HTTP  • HTTPS  • TFTP  • BOOTP  • GMRP  • DCP  • LLDP  • SNMP v1  • SNMP v2  • SNMP v3 | Yes  |
| cascading in cases of star topology  product functions / management, configuration, engineering  product function   | Yes  |

| • ISMO davice energia information  | Yes  |
|--|------|
| <ul> <li>I&amp;M0 - device-specific information</li> <li>I&amp;M1 - higher level designation/location designation</li> </ul> | Yes  |
| product functions / diagnostics  |      |
| product function   |      |
| port diagnostics   | Yes  |
| statistics Packet Size   | Yes  |
| statistics racket type     statistics packet type  | Yes  |
| error statistics   | Yes  |
| SysLog   | Yes  |
| product functions / VLAN   | . 30 |
| product function   |      |
| VLAN - port based  | Yes  |
| <ul> <li>VLAN - protocol-based</li> </ul>  | No   |
| VLAN - IP-based  | No   |
| <ul> <li>VLAN dynamic</li> </ul>   | Yes  |
| number of VLANs / maximum  | 255  |
| number of VLANs - dynamic / maximum  | 255  |
| protocol / is supported / GVRP   | Yes  |
| product functions / DHCP   |      |
| product function   |      |
| DHCP client  | Yes  |
| DHCP Option 82   | Yes  |
| DHCP Option 66   | Yes  |
| DHCP Option 67   | Yes  |
| product functions / redundancy   |      |
| product function   |      |
| • ring redundancy  | Yes  |
| <ul> <li>High Speed Redundancy Protocol (HRP)</li> </ul>   | Yes  |
| <ul> <li>high speed redundancy protocol (HRP) with redundancy<br/>manager</li> </ul>   | Yes  |
| <ul> <li>high speed redundancy protocol (HRP) with standby<br/>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>redundancy procedure STP</li> </ul>   | Yes  |
| <ul> <li>redundancy procedure RSTP</li> </ul>  | Yes  |
| <ul> <li>redundancy procedure MSTP</li> </ul>  | Yes  |
| <ul> <li>Parallel Redundancy Protocol (PRP)/operation in the<br/>PRP-network</li> </ul>                                      | Yes  |
| <ul> <li>Parallel Redundancy Protocol (PRP)/Redundant Network<br/>Access (RNA)</li> </ul>                                    | No   |
| passive listening  | Yes  |
| protocol / is supported  |      |
| • STP/RSTP   | Yes  |
| • STP  | Yes  |
| • RSTP   | Yes  |
| • MSTP   | Yes  |
| RSTP big network support   | Yes  |
| • LACP   | Yes  |
| product functions / security   |      |
| product function   | V    |
| ACL - MAC-based  | Yes  |
| ACL - port/MAC-based  ACL - port/MAC-based   | Yes  |
| • IEEE 802.1x (radius)   | Yes  |
| broadcast/multicast/unicast limiter  | Yes  |
| broadcast blocking   | Yes  |
| protocol / is supported  | V    |
| • SSH  | Yes  |
| product functions / time   |      |
| product function   |      |

| • SICL OCK support   | Voc   |
|--|---|
| SICLOCK support  protect / is supported.                                 | Yes   |
| protocol / is supported  | Voc   |
| • NTP  | Yes   |
| SNTP  IEEE 4500 coefficients   | Yes   |
| IEEE 1588 profile default  | Yes   |
| standards, specifications, approvals                                     |   |
| standard   | EM2644: Close 4 Divisor 2 Croup A. P. C. D./T4 Close 4 Zone 2 Croup IIC   |
| • for FM   | FM3611: Class 1, Divison 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4   |
| <ul> <li>for safety / from CSA and UL</li> </ul>                         | UL 60950-1, CSA C22.2 No. 60950-1-03  |
| <ul> <li>for emitted interference</li> </ul>                             | EN 61000-6-4:2007 (Class A)   |
| for interference immunity  | EN 61000-6-2:2005   |
| MTBF   | 25 a  |
| reference code   |   |
| <ul><li>according to IEC 81346-2</li></ul>                               | KF  |
| • according to IEC 81346-2:2019  | KFE   |
| standards, specifications, approvals / CE                                |   |
| certificate of suitability / CE marking                                  | 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   |
| • from CSA and UL  | 0145X UL 1604 and UL 2279-15 (Hazardous Location), CSA C22.2 No. 213-M1987,   |
| • IIOIII CSA and OL  | Class 1 / Division 2 / Group A, B, C, D / T4, Class 1 / Zone 2 / Group IIC / T4   |
| certificate of suitability   |   |
| <ul> <li>CCC / for hazardous zone according to GB standard</li> </ul>    | Yes   |
| CCC / for hazardous zone according to GB standard / as                   | Ex nA IIC T4 Gc   |
| marking  |   |
| standards, specifications, approvals / other                             |   |
| certificate of suitability   | EN 61000-6-2:2005, EN 61000-6-4:2007  |
| • C-Tick   | Yes   |
| KC approval  | Yes   |
| railway application in accordance with EN 50155                          | No  |
| standards, specifications, approvals / marine classification             |   |
| Marine classification association  |   |
| French marine classification society (BV)                                | Yes   |
| Korean Register of Shipping (KRS)  | 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: Image database   | http://automation.siemens.com/bilddb  |
| to website: CAx-Download-Manager     to website: Industry Online Compart | http://www.siemens.com/cax  |
| to website: Industry Online Support                                      | https://support.industry.siemens.com  |
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ATEX-Zone 2-Declaration



<u>FM</u>

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**Declaration of Conformity** 



Manufacturer Declaration Type Test Certificates/Test Report

**Test Certificates** 



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