## **SIEMENS**

## **Data sheet**

6GK5524-8GS00-4AR2

SCALANCE XR524-8C; managed IE switch; layer 3 with Key-Plug available; power supply 2x 230 V AC; 24x 10/100/1000 Mbit/s RJ45; 8x 100/1000 Mbit/s SFP; contains 8 combo ports; in total 24 ports can be used; error signaling contact; select/set pushbutton; PROFINET IO device; redundancy functions; Office features (RSTP, VLAN, IGMP, ...); C-PLUG in scope of supply.



| product type designation  | SCALANCE XR524-8C                  |  |
|---|------------------------------------|--|
| transfer rate   |                                    |  |
| transfer rate   | 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s |  |
| interfaces / for communication / maximum configuration for modular devices  |                                    |  |
| number of electrical ports / maximum  | 24                                 |  |
| number of optical ports / maximum   | 8                                  |  |
| interfaces / for communication / integrated                                 |                                    |  |
| number of electrical connections  |                                    |  |
| <ul> <li>for network components or terminal equipment</li> </ul>            | 24; RJ45                           |  |
| number of 100 Mbit/s ST(BFOC) ports   |                                    |  |
| • for multimode   | 0                                  |  |
| number of electrical connections  |                                    |  |
| • for SFP   | 8                                  |  |
| number of combo ports / with RJ45 interface for optical plug-in transceiver | 8                                  |  |
| interfaces / for communication / plug-in                                    |                                    |  |
| number of electrical connections  |                                    |  |
| • for SFP   | 8                                  |  |
| interfaces / other  |                                    |  |
| number of electrical connections  |                                    |  |
| <ul> <li>for operator console</li> </ul>                                    | 1                                  |  |
| <ul> <li>for management purposes</li> </ul>                                 | 1                                  |  |
| <ul> <li>for signaling contact</li> </ul>                                   | 1                                  |  |
| • for power supply  | 1                                  |  |
| type of electrical connection   |                                    |  |
| <ul> <li>for operator console</li> </ul>                                    | RJ11                               |  |
| <ul> <li>for management purposes</li> </ul>                                 | RJ45                               |  |
| <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/KEY-PLUG   | Yes                                |  |
| product feature / hot-swappable interface modules                           | 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                        | Yes                                |  |

| type of voltage / 1 / of the supply voltage  | AC  |
|--|---|
| <ul><li>supply voltage / 1 / rated value</li></ul>   | 230 V   |
| <ul><li>power loss [W] / 1 / rated value</li></ul>   | 24 W  |
| <ul> <li>supply voltage / 1 / rated value</li> </ul>   | 90 264 V  |
| <ul><li>consumed current / 1 / maximum</li></ul>   | 0.6 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   |
| <ul> <li>fuse protection type / 1 / at input for supply voltage</li> </ul>   | 3.15 A / 250 V  |
| ambient conditions   |   |
| ambient temperature  |   |
| during operation   | -25 +60 °C  |
| during storage   | -40 +85 °C  |
| during transport   | -40 +85 °C  |
| relative humidity  | 40 100 C  |
| at 25 °C / without condensation / during operation /   | 95 %  |
| maximum  | 93 /0   |
| protection class IP  | IP20  |
| design, dimensions and weights   |   |
| design   | 19" rack  |
| number of modular height units / relating to 19-inch cabinet   | 1   |
| width  | 449 mm  |
| height   | 44 mm   |
| depth  | 305 mm  |
| net weight   | 4.5 kg  |
| fastening method   | 4.0 Ng  |
| 19-inch installation   | Yes   |
| 35 mm top hat DIN rail mounting  | No  |
| wall mounting  | No  |
| S7-300 rail mounting   | No  |
| -  | No  |
| S7-1500 rail mounting  |   |
| type of cable guillet  | Cable outlet at front   |
| type of cable outlet   | Cable outlet at front   |
| product features, product functions, product components / gen  | eral  |
| product features, product functions, product components / gen cascading in cases of star topology  |   |
| product features, product functions, product components / gen<br>cascading in cases of star topology<br>product functions / management, configuration, engineering   | eral  |
| product features, product functions, product components / gen<br>cascading in cases of star topology<br>product functions / management, configuration, engineering<br>product function   | any (depending only on signal propagation time)   |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering product function  • CLI   | any (depending only on signal propagation time)  Yes                                    |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering product function  • CLI • web-based management  | any (depending only on signal propagation time)  Yes Yes                                |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering product function  • CLI • web-based management • MIB support  | any (depending only on signal propagation time)  Yes Yes Yes                            |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering product function  • CLI • web-based management • MIB support • TRAPs via email  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes                    |
| product features, product functions, product components / gen 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  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes                |
| product features, product functions, product components / gen 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   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes        |
| product features, product functions, product components / gen 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  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes    |
| product features, product functions, product components / gen 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  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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 telegram length / for Ethernet / maximum   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering  product function   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering  product function   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering  product function   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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  telegram length / for Ethernet / maximum  protocol / is supported  • Telnet  • HTTP  • HTTPS                                 | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen cascading in cases of star topology  product functions / management, configuration, engineering  product function  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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  telegram length / for Ethernet / maximum  protocol / is supported  • Telnet  • HTTP  • HTTPS                                 | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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  telegram length / for Ethernet / maximum  protocol / is supported  • Telnet  • HTTP  • HTTPS  • TFTP                         | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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  telegram length / for Ethernet / maximum  protocol / is supported  • Telnet  • HTTP  • HTTPS  • TFTP                           | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering  product function   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen cascading in cases of star topology  product functions / management, configuration, engineering  product function  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen 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  telegram length / for Ethernet / maximum  protocol / is supported  • Telnet  • HTTP  • HTTPS  • TFTP  • BOOTP  • GMRP  • DCP | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| product features, product functions, product components / gen cascading in cases of star topology product functions / management, configuration, engineering  product function   | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |
| 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  telegram length / for Ethernet / maximum  protocol / is supported  TEINET  HTTP  HTTPS  TFTP  BOOTP  GMRP  DCP  LLDP  SNMP v1  | any (depending only on signal propagation time)  Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye |

| <ul> <li>IGMP (snooping/querier)</li> </ul>                                      | Yes  |
|--|--|
| identification & maintenance function  |  |
| 1&M0 - device-specific information   | Yes  |
| I&M1 - higher level designation/location designation                             | Yes  |
| product functions / diagnostics  |  |
| product function   |  |
| port diagnostics   | Yes  |
| statistics Packet Size   | Yes  |
| statistics packet type   | Yes  |
| error statistics   | Yes  |
| • SysLog   | Yes  |
| product functions / VLAN   |  |
| product function   |  |
| VLAN - port based  | Yes  |
| <ul> <li>VLAN - protocol-based</li> </ul>  | Yes  |
| VLAN - IP-based  | Yes  |
| VLAN dynamic   | 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  |
| <ul> <li>DHCP Option 67</li> </ul>   | Yes  |
| product functions / routing  |  |
| service / routing / note   | IP routing in combination with KEY-PLUG XR-500 |
| product function   |  |
| • static IP routing  | Yes  |
| <ul> <li>static IP routing IPv6</li> </ul>                                       | Yes  |
| <ul> <li>dynamic IP routing</li> </ul>   | Yes  |
| dynamic IP routing IPv6  | Yes  |
| protocol / is supported  |  |
| • RIPv2  | Yes  |
| RIPnG for IPv6   | Yes  |
| OSPFv2   | Yes  |
| OSPFv3 for IPv6  | Yes  |
| • VRRP   | Yes  |
| VRRP for IPv6  | Yes  |
| product functions / redundancy   |  |
| product function   |  |
| • ring redundancy  | Yes  |
| High Speed Redundancy Protocol (HRP)   | Yes  |
| <ul> <li>high speed redundancy protocol (HRP) with redundancy manager</li> </ul> | Yes  |
| high speed redundancy protocol (HRP) with standby                                | Yes  |
| redundancy   | ,  |
| protocol / is supported / Media Redundancy Protocol (MRP)                        | Yes  |
| product function   |  |
| <ul> <li>media redundancy protocol (MRP) with redundancy manager</li> </ul>      | Yes  |
| <ul> <li>Media Redundancy Protocol Interconnection (MRP-I)</li> </ul>            | Yes  |
| <ul> <li>redundancy procedure STP</li> </ul>                                     | Yes  |
| <ul> <li>redundancy procedure RSTP</li> </ul>                                    | Yes  |
| <ul><li>redundancy procedure RSTP+</li></ul>                                     | Yes  |
| <ul> <li>redundancy procedure MSTP</li> </ul>                                    | Yes  |
| passive listening  | Yes  |
| protocol / is supported  |  |
| • LACP   | Yes  |
| product functions / security   | 165  |

| product function   |  |
|--|--|
| ACL - MAC-based  | Yes  |
| ACL - port/MAC-based   | Yes  |
| ■ IEEE 802.1x (radius)   | Yes  |
| <ul> <li>broadcast/multicast/unicast limiter</li> </ul>  | Yes  |
| broadcast blocking   | Yes  |
| protocol / is supported  |  |
| • SSH  | Yes  |
| product functions / time   |  |
| product function   |  |
| <ul> <li>SICLOCK support</li> </ul>  | Yes  |
| protocol / is supported  |  |
| • NTP  | Yes  |
| • SNTP   | Yes  |
| standards, specifications, approvals   |  |
| standard   |  |
| for safety / from CSA and UL   | UL 60950-1; CSA C22.2 No. 213-M1987                                |
| for emitted interference   | EN 61000-6-4 (Class A)   |
| for interference immunity  | EN 61000-6-2   |
| reference code   |  |
| according to IEC 81346-2   | KF   |
| • according to IEC 81346-2:2019  | KFE  |
| standards, specifications, approvals / CE  |  |
| certificate of suitability / CE marking  | Yes  |
| standards, specifications, approvals / other   | 163  |
|  | EN 64000 6 2 EN 64000 6 4  |
| certificate of suitability  • C-Tick   | EN 61000-6-2, EN 61000-6-4<br>Yes                                  |
|  | Yes  |
| KC approval     Tapproval  |  |
| • E1 approval  | No<br>No   |
| • E1 approval  | No   |
| standards, specifications, approvals / marine classification                                   |  |
| Marine classification association  | V  |
| American Bureau of Shipping Europe Ltd. (ABS)  | Yes  |
| French marine classification society (BV)  | Yes  |
| • DNV GL   | Yes  |
| Korean Register of Shipping (KRS)  | Yes  |
| Lloyds Register of Shipping (LRS)  | Yes  |
| Nippon Kaiji Kyokai (NK)   | Yes  |
| Polski Rejestr Statkow (PRS)   | Yes  |
| Royal Institution of Naval Architects (RINA)   | Yes  |
| further information / internet links   |  |
| internet link  |  |
| <ul><li>to web page: selection aid TIA Selection Tool</li></ul>                                | 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                                  |
| <ul> <li>to website: Information and Download Center</li> </ul>                                | http://www.siemens.com/industry/infocenter                         |
| • to website: Selection guide for cables and connectors  | https://sie.ag/2QdlxcP   |
| <ul> <li>to website: Image database</li> </ul>   | http://automation.siemens.com/bilddb                               |
|  |  |
| <ul> <li>to website: CAx-Download-Manager</li> </ul>   | http://www.siemens.com/cax   |
| <ul><li>to website: CAx-Download-Manager</li><li>to website: Industry Online Support</li></ul> | http://www.siemens.com/cax<br>https://support.industry.siemens.com |
| <u> </u>   |  |
| • to website: Industry Online Support  |  |

undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under https://www.siemens.com/cert. (V4.6)

## Approvals / Certificates

**General Product Approval** 

EMC

**Declaration of Conformity** 

Manufacturer Declara-<u>tion</u>

Special Test Certific-<u>ate</u>



Manufacturer Declara-<u>tion</u>



**Declaration of Con-**

Marine / Shipping









NK / Nippon Kaiji Ky-<u>okai</u>



Marine / Shipping

other

Environment







PROFINET-Certifica-<u>tion</u>



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11/9/2023

