# **SIEMENS**

## Data sheet

# 6GK5524-8GS00-2AR2

SCALANCE XR524-8C; managed IE Switch; Layer 3 with key plug available; Power supply 24 V DC; 24x 10/100/1000 Mbit/s RJ45; 8x 100/1000 Mbit/s SFP; contains 8 combo ports; in in total 24 ports can be used; error signaling contact; Select/set button; PROFINET IO Device; redundancy functions; Office features (RSTP, VLAN, IGMP, ...); C-plug in scope of delivery



Transmission rate	
Transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
Interfaces / for communication / integrated	
Number of electrical connections	
• for network components or terminal equipment	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	8
optical plug-in transceiver	
Interfaces / for communication / pluggable / maximu	ım
Number of electrical connections	
• for SFP	8
Interfaces / others	
Number of electrical connections	
• for operator console	1
<ul><li>for management purposes</li></ul>	1

for signaling contact	1
• for power supply	1
• for redundant voltage supply	1
Type of electrical connection	
• for operator console	RJ11
for management purposes	RJ45
for signaling contact	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
Operating current / of the signaling contacts	
• at DC / maximum	0.1 A
Supply voltage, current consumption, power loss	
Type of voltage supply / redundant power supply unit	No
Type of voltage / of the supply voltage	DC
Supply voltage	
external	24 V
external / minimum	19.2 V
external / maximum	28.8 V
Product component / fusing at power supply input	Yes
Fuse protection type / at input for supply voltage	3.15 A / 125 V
Consumed current / maximum	1 A
Permitted ambient conditions	
Ambient temperature	
<ul><li>during operation</li></ul>	-40 +70 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
Relative humidity	
<ul> <li>at 25 °C / without condensation / during</li> </ul>	95 %
operation / maximum	IDOO
Protection class IP	IP20
Design, dimensions and weight	
Design	19" rack
	19" rack
Design  Number of modular height units / relating to 19-inch	

Depth	305 mm
Net weight	3.8 kg
Mounting type	
• 19-inch installation	Yes
• 35 mm DIN rail mounting	No
wall mounting	No
S7-300 rail mounting	No
• S7-1500 rail mounting	No
Type of cable outlet	Cable outlet at front

# Product properties, functions, components / general

Cascading in cases of star topology any (depending only on signal propagation time)

Product function         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         Yes           • Telnet         Yes           • HTTP         Yes           • HTTP         Yes           • FTP         Yes           • FTP         Yes           • BOOTP         Yes           • DCP         Yes           • LLDP         Yes           • SNMP v1         Yes           • SNMP v2         Yes           • SNMP v3         Yes           • IGMP (snooping/querier)         Yes           Identification & maintenance function         Yes	Product functions / management, configuration	
web-based management     MIB support     Yes     MIB support     Yes     TRAPs via email     Configuration with STEP 7     RMON     Port mirroring     Port mirroring     Multiport mirroring     Yes     ROS     PROFINET IO diagnosis     Switch-managed     Yes     Switch-managed     Yes     Protocol / is supported     Telnet     Telnet     HTTP     HTTPS     HTTPS     FTP     SOOTP     SOOTP     SOMRP     SONMP V1     SNMP V2     SNMP V3     Identification & maintenance function  Yes  Identification & maintenance function  Yes  Identification & maintenance function  Yes  Identification & maintenance function	Product function	
• 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           Telegram length / for Ethernet / maximum         9216 byte           Protocol / is supported         Yes           • Telnet         Yes           • HTTP         Yes           • HTTPS         Yes           • TFTP         Yes           • FTP         Yes           • BOOTP         Yes           • BOOTP         Yes           • LLDP         Yes           • SNMP v1         Yes           • SNMP v2         Yes           • IGMP (snooping/querier)         Yes           Identification & maintenance function         Yes	• CLI	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           • switch-managed         Yes           • Telegram length / for Ethernet / maximum         9216 byte           Protocol / is supported         Yes           • HTTP         Yes           • HTTPS         Yes           • TFTP         Yes           • FTP         Yes           • BOOTP         Yes           • GMRP         Yes           • DCP         Yes           • LLDP         Yes           • SNMP v1         Yes           • SNMP v2         Yes           • IGMP (snooping/querier)         Yes           Identification & maintenance function         Identification & maintenance function	<ul><li>web-based management</li></ul>	Yes
Configuration with STEP 7     RMON     Yes     Port mirroring     Yes     multiport mirroring     Yes     PROFINET IO diagnosis     yes     switch-managed     Yes  Telegram length / for Ethernet / maximum     Protocol / is supported     Telnet     HTTP     Yes     HTTPS     Yes     TFTP     Yes     BOOTP     GMRP     DCP     LLDP     SNMP ∨1     SNMP ∨2     SNMP ∨3     IGMP (snooping/querier)  Identification & maintenance function  Yes  Yes  Ves  Ves  Ves  Ves  Ves  Ves	MIB support	Yes
	<ul> <li>TRAPs via email</li> </ul>	Yes
<ul> <li>Port mirroring</li> <li>multiport mirroring</li> <li>CoS</li> <li>PROFINET IO diagnosis</li> <li>switch-managed</li> <li>Yes</li> <li>Telegram length / for Ethernet / maximum</li> <li>Protocol / is supported</li> <li>Telnet</li> <li>Yes</li> <li>HTTP</li> <li>HTTPS</li> <li>HTTPS</li> <li>FTP</li> <li>Yes</li> <li>FTP</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Identification &amp; maintenance function</li> </ul>	<ul> <li>Configuration with STEP 7</li> </ul>	Yes
<ul> <li>multiport mirroring</li> <li>CoS</li> <li>PROFINET IO diagnosis</li> <li>switch-managed</li> <li>Telegram length / for Ethernet / maximum</li> <li>Protocol / is supported</li> <li>Telnet</li> <li>HTTP</li> <li>HTTPS</li> <li>HTTPS</li> <li>Yes</li> <li>TFTP</li> <li>FTP</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Identification &amp; maintenance function</li> </ul>	• RMON	Yes
	Port mirroring	Yes
● PROFINET IO diagnosis         Yes           ● switch-managed         Yes           Telegram length / for Ethernet / maximum         9216 byte           Protocol / is supported         ***         ***             ***	<ul> <li>multiport mirroring</li> </ul>	Yes
● switch-managed         Yes           Telegram length / for Ethernet / maximum         9216 byte           Protocol / is supported         **Telnet           ● Telnet         Yes           ● HTTP         Yes           ● HTTPS         Yes           ● TFP         Yes           ● BOOTP         Yes           ● GMRP         Yes           ● DCP         Yes           ● LLDP         Yes           ● SNMP v1         Yes           ● SNMP v2         Yes           ● SNMP v3         Yes           ● IGMP (snooping/querier)         Yes           Identification & maintenance function         **Yes	• CoS	Yes
Telegram length / for Ethernet / maximum  Protocol / is supported  • Telnet  • HTTP  • HTTP  • HTTPS  • TFTP  • FTP  • BOOTP  • GMRP  • DCP  • LLDP  • SNMP v1  • SNMP v2  • SNMP v3  • IGMP (snooping/querier)  Identification & maintenance function	<ul> <li>PROFINET IO diagnosis</li> </ul>	Yes
Protocol / is supported  Telnet  HTTP  HTTP  HTTPS  Yes  TFTP  FTP  FTP  BOOTP  GMRP  CMRP  CULDP  SNMP v1  SNMP v2  SNMP v3  IGMP (snooping/querier)  Identification & maintenance function	<ul><li>switch-managed</li></ul>	Yes
<ul> <li>Telnet</li> <li>HTTP</li> <li>HTTPS</li> <li>Yes</li> <li>TFTP</li> <li>Yes</li> <li>FTP</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Identification &amp; maintenance function</li> </ul>	Telegram length / for Ethernet / maximum	9216 byte
<ul> <li>HTTP</li> <li>HTTPS</li> <li>Yes</li> <li>TFTP</li> <li>Yes</li> <li>FTP</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Identification &amp; maintenance function</li> </ul>	Protocol / is supported	
<ul> <li>HTTPS</li> <li>TFTP</li> <li>Yes</li> <li>FTP</li> <li>Yes</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Identification &amp; maintenance function</li> </ul>	• Telnet	Yes
<ul> <li>TFTP</li> <li>FTP</li> <li>Yes</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Identification &amp; maintenance function</li> </ul>	• HTTP	Yes
<ul> <li>FTP</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Identification &amp; maintenance function</li> </ul>	• HTTPS	Yes
<ul> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> </ul> Yes <ul> <li>Yes</li> </ul> Yes <ul> <li>Yes <ul> <li>Yes</li> </ul> </li> </ul> Yes <ul> <li>Identification &amp; maintenance function</li> </ul> Yes <ul> <li>Identification &amp; maintenance function</li> </ul>	• TFTP	Yes
<ul> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Identification &amp; maintenance function</li> </ul>	• FTP	Yes
DCP     Yes     LLDP     Yes     SNMP v1     SNMP v2     SNMP v3     IGMP (snooping/querier)  Identification & maintenance function  Yes  Yes  Yes  Yes	• BOOTP	Yes
<ul> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Identification &amp; maintenance function</li> </ul>	• GMRP	Yes
SNMP v1 SNMP v2 SNMP v3 IGMP (snooping/querier)  Yes  Yes Yes Yes  Yes  Yes	• DCP	Yes
SNMP v2 SNMP v3 IGMP (snooping/querier)  Yes  Yes  Yes  Yes  Yes  Yes	• LLDP	Yes
SNMP v3     IGMP (snooping/querier)  Identification & maintenance function  Yes  Yes	• SNMP v1	Yes
IGMP (snooping/querier)  Identification & maintenance function  Yes	• SNMP v2	Yes
Identification & maintenance function	• SNMP v3	Yes
	<ul><li>IGMP (snooping/querier)</li></ul>	Yes
• I&M0 - device-specific information Yes	Identification & maintenance function	
	• I&M0 - device-specific information	Yes

<ul> <li>I&amp;M1 – higher-level designation/location designation</li> </ul>	Yes
_	
Product functions / Diagnosis Product function	
Port diagnostics	Yes
Statistics Packet Size	Yes
Statistics packet type	Yes
• Error statistics	Yes
• SysLog	Yes
Product functions / VLAN	
Product function	
<ul> <li>VLAN - port based</li> </ul>	Yes
<ul> <li>VLAN - protocol-based</li> </ul>	Yes
VLAN - IP-based	Yes
<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
<ul> <li>DHCP Option 66</li> </ul>	Yes
DHCP Option 67	Yes
Product functions / Routing	
Product function	
Static IP routing	Yes
<ul> <li>Static IP routing IPv6</li> </ul>	Yes
<ul><li>dynamic IP routing</li></ul>	Yes
<ul><li>dynamic IP routing IPv6</li></ul>	Yes
Protocol / is supported	
• RIPv2	Yes
<ul> <li>RIPnG for IPv6</li> </ul>	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	
high speed redundancy protocol (HRP) with	Yes	
redundancy manager		
<ul> <li>high speed redundancy protocol (HRP) with standby 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	
• redundancy procedure RSTP	Yes	
<ul> <li>redundancy procedure MSTP</li> </ul>	Yes	
Passive listening	Yes	
Protocol / is supported		
• LACP	Yes	
Product functions / Security		
Product function		
ACL - MAC-based	Yes	
<ul> <li>ACL - port/MAC-based</li> </ul>	Yes	
• IEEE 802.1x (radius)	Yes	
<ul> <li>Broadcast/Multicast/Unicast Limiter</li> </ul>	Yes	
<ul> <li>broadcast blocking</li> </ul>	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	available soon	
• for emitted interference	EN 61000-6-4 (Class A)	
• for interference immunity	EN 61000-6-2	
Standards, specifications, approvals / CE		
Certificate of suitability / CE marking	Yes	
Standards, specifications, approvals / miscellaneous		
Certificate of suitability	EN 61000-6-2, EN 61000-6-4	
• C-Tick	Yes	

No • E1 approval • e1 approval No KC approval Yes

### Standards, specifications, approvals / ship classification

#### Marine classification association

American Bureau of Shipping Europe Ltd.

(ABS)

• Det Norske Veritas (DNV)

• Germanische Lloyd (GL)

• DNV GL

• Lloyds Register of Shipping (LRS)

Nippon Kaiji Kyokai (NK)

• Polski Rejestr Statkow (PRS)

• Royal Institution of Naval Architects (RINA)

No

Yes

No

Yes

Yes

Yes

Yes

Yes

### Further Information / Internet Links

#### Internet-Link

• to website: Selector SIMATIC NET **SELECTION TOOL** 

• to website: Industrial communication

• to website: Industry Mall

• to website: Information and Download Center

• to website: Image database

• to website: CAx Download Manager

• to website: Industry Online Support

http://www.siemens.com/snst

http://www.siemens.com/simatic-net

https://mall.industry.siemens.com

http://www.siemens.com/industry/infocenter

http://automation.siemens.com/bilddb

http://www.siemens.com/cax

https://support.industry.siemens.com

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last modified: 01/16/2018