## **SIEMENS**

## **Data sheet**

## 6GK5334-3TS01-3AR3

SCALANCE XRM334; managed layer 2; IE switch, 19" rack; 20x, 100/1000 Mbps RJ45 port; 2x 1G/2.5G/5G/10 Gbps RJ45 port; 4x 100 MB/1G SFP port; 8x 1G/10G SFP+ port; LED diagnostics; error signaling contact; select/set button; PROFINET IO device; network management; integrated redundancy manager; office features (RSTP, VLAN, IGMP,..); CLP included in scope of supply; power supply 230 V AC;



product type designation	
product brand name	SCALANCE
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 2.5 Gbit/s, 5 Gbit/s, 10 Gbit/s
interfaces / for communication / integrated	
number of electrical connections	
<ul> <li>for network components or terminal equipment</li> </ul>	22; RJ45
number of 10/100/1000 Mbit/s RJ45 ports	
with securing collar	22
number of 1000/2500/5000/10000 Mbps RJ45 ports / with securing collar	2
number of electrical connections	
• for SFP	4; 100 Mbps and 1000 Mbps SFP usable
• for SFP+	8; 1000 Mbps and 10000 Mbps SFP usable
interfaces / other	
number of electrical connections	
<ul> <li>for operator console</li> </ul>	1
<ul> <li>for signaling contact</li> </ul>	1
for power supply	1
type of electrical connection	
for operator console	USB (2.0 Port, Type B, serial via USB)
<ul> <li>for signaling contact</li> </ul>	2-pole terminal block
for power supply	IEC plug C14 AC supply or 2-pole terminal block for DC supply
design of the removable storage	
• CLP	Yes
operating voltage / of the signaling contacts	
at AC / rated value	24 V
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	No
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>	240 V; 100V 240V DC
• power loss [W] / 1 / rated value	99 W
<ul><li>supply voltage / 1 / rated value</li></ul>	77 300 V
<ul><li>consumed current / 1 / maximum</li></ul>	0.8 A
<ul> <li>type of electrical connection / 1 / for power supply</li> </ul>	2 x 2-pole terminal block
<ul> <li>product component / 1 / fusing at power supply input</li> </ul>	Yes

• fuse protection type / 1 / at input for supply voltage	F 4A / 250 V
type of voltage / 2 / of the supply voltage	AC (50 / 60Hz)
mbient conditions	
ambient temperature / in horizontal mounting position / during operation	-25 +60 °C; Starting at -25 °C; The maximum ambient temperature during operation depends on the operating height and the plug-in transceivers, see also manual.
installation altitude / at height above sea level / maximum	3000 m
relative humidity	
at 25 °C / without condensation / during operation / maximum	95 %
operating condition / fanless operation	Yes
protection class IP	IP20
esign, dimensions and weights	
design	19-inch rack
number of modular height units / relating to 19-inch cabinet	1
width	446 mm
height	43.6 mm
depth	374.8 mm
net weight	8.2 kg
material / of the enclosure	metal
fastening method  • 19-inch installation	Yes
<ul> <li>reduct features, product functions, product components / ger</li> </ul>	
cascading in cases of star topology	any (depending only on signal propagation time)
number of automatically learnable MAC addresses	16382
number of QoS queues / per port	8
product function	
QoS according to IEEE 802.1Q	Yes
product feature	166
Store & Forward switching method	Yes
roduct functions / management, configuration, engineering	
product function	
• CLI	Yes
web-based management	Yes
MIB support	Yes
TRAPs via email	Yes
<ul><li>configuration with STEP 7</li></ul>	Yes
• RMON	No
SMTP server	No
port mirroring	Yes
multiport mirroring	Yes
Encapsulated Remote Traffic Mirroring (ERTM)	Yes
• CoS	Yes
PROFINET IO diagnosis	Yes
switch-managed	Yes
PROFINET conformity class	В
network load class / according to PROFINET	2
telegram length / for Ethernet / maximum	9194 byte
protocol / is supported	
Telnet	No
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• SFTP	Yes
• BOOTP	Yes
• NETCONF	Yes
• GMRP	Yes
• DCP	Yes
• LLDP	Yes

• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
IGMP (snooping/querier)	Yes
identification & maintenance function	
<ul> <li>I&amp;M0 - device-specific information</li> </ul>	Yes
<ul> <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 packet type	Yes
error statistics	Yes
• SysLog	Yes
product functions / VLAN	103
product function	V.
VLAN - port based	Yes
VLAN - protocol-based	No
VLAN - IP-based	No
VLAN dynamic	Yes
number of VLANs / maximum	512
number of VLANs - dynamic / maximum	512
product functions / DHCP	
product function	
DHCP server	No
DHCP client	Yes
DHCP Option 82	No
DHCP Option 66	Yes
DHCP Option 67	Yes
product functions / redundancy	
protocol / is supported / Media Redundancy Protocol (MRP)	No
product function	
media redundancy protocol (MRP) with redundancy	Yes
manager	
manager  • Media Redundancy Protocol Interconnection (MRP-I)	No 
<ul><li>manager</li><li>Media Redundancy Protocol Interconnection (MRP-I)</li><li>ring redundancy</li></ul>	Yes
manager  • Media Redundancy Protocol Interconnection (MRP-I)	
<ul> <li>manager</li> <li>Media Redundancy Protocol Interconnection (MRP-I)</li> <li>ring redundancy</li> <li>high speed redundancy protocol (HRP) with redundancy</li> </ul>	Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ring redundancy  high speed redundancy protocol (HRP) with redundancy manager  high speed redundancy protocol (HRP) with standby	Yes No
<ul> <li>manager</li> <li>Media Redundancy Protocol Interconnection (MRP-I)</li> <li>ring redundancy</li> <li>high speed redundancy protocol (HRP) with redundancy manager</li> <li>high speed redundancy protocol (HRP) with standby redundancy</li> </ul>	Yes No
manager  Media Redundancy Protocol Interconnection (MRP-I)  ring redundancy  high speed redundancy protocol (HRP) with redundancy manager  high speed redundancy protocol (HRP) with standby redundancy  redundancy  redundancy procedure STP	Yes No No Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ring redundancy  high speed redundancy protocol (HRP) with redundancy manager  high speed redundancy protocol (HRP) with standby redundancy  redundancy  redundancy procedure STP  redundancy procedure RSTP	Yes No No Yes Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ring redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP+	Yes No No Yes Yes Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ring redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP	Yes No No Yes Yes Yes Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ring redundancy  high speed redundancy protocol (HRP) with redundancy manager  high speed redundancy protocol (HRP) with standby redundancy  redundancy  redundancy procedure STP  redundancy procedure RSTP  redundancy procedure RSTP  redundancy procedure MSTP  passive listening  eRSTP	Yes No No Yes Yes Yes Yes Yes No
manager  Media Redundancy Protocol Interconnection (MRP-I)  ing redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP eredundancy procedure MSTP eredundancy procedure MSTP passive listening eRSTP	Yes No No Yes Yes Yes Yes Yes Yes Yes No Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ring redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP eredundancy procedure MSTP passive listening eRSTP  protocol / is supported LACP	Yes No No Yes Yes Yes Yes Yes No
manager  • Media Redundancy Protocol Interconnection (MRP-I)  • ring redundancy  • high speed redundancy protocol (HRP) with redundancy manager  • high speed redundancy protocol (HRP) with standby redundancy  • redundancy  • redundancy procedure STP  • redundancy procedure RSTP  • redundancy procedure RSTP+  • redundancy procedure MSTP  • passive listening  • eRSTP  protocol / is supported  • LACP  system modification during operation	Yes No No Yes Yes Yes Yes Yes Yes No Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ing redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP redundancy procedure MSTP redundancy procedure MSTP spassive listening RRSTP protocol / is supported LACP system modification during operation product function / configuration in RUN via CiR/H-CiR	Yes No No Yes Yes Yes Yes Yes Yes Yes No Yes
manager  • Media Redundancy Protocol Interconnection (MRP-I)  • ring redundancy  • high speed redundancy protocol (HRP) with redundancy manager  • high speed redundancy protocol (HRP) with standby redundancy  • redundancy  • redundancy procedure STP  • redundancy procedure RSTP  • redundancy procedure RSTP  • redundancy procedure MSTP  • passive listening  • eRSTP  protocol / is supported  • LACP  system modification during operation  product function / configuration in RUN via CiR/H-CiR	Yes No No Yes Yes Yes Yes Yes No No No
manager  Media Redundancy Protocol Interconnection (MRP-I)  ing redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP passive listening RRSTP protocol / is supported LACP system modification during operation product function / configuration in RUN via CiR/H-CiR product functions / security product conformity / according to IEEE 802.1x-port based Network Access Control	Yes No No Yes Yes Yes Yes Yes Yes No Yes
manager  • Media Redundancy Protocol Interconnection (MRP-I)  • ring redundancy  • high speed redundancy protocol (HRP) with redundancy manager  • high speed redundancy protocol (HRP) with standby redundancy  • redundancy  • redundancy procedure STP  • redundancy procedure RSTP  • redundancy procedure RSTP  • redundancy procedure MSTP  • passive listening  • eRSTP  protocol / is supported  • LACP  system modification during operation  product function / configuration in RUN via CiR/H-CiR  product functions / security  product conformity / according to IEEE 802.1x-port based	Yes No No Yes Yes Yes Yes Yes No No No
manager  Media Redundancy Protocol Interconnection (MRP-I)  ing redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP passive listening RRSTP protocol / is supported LACP system modification during operation product function / configuration in RUN via CiR/H-CiR product functions / security product conformity / according to IEEE 802.1x-port based Network Access Control	Yes No No Yes Yes Yes Yes Yes No No No
manager  • Media Redundancy Protocol Interconnection (MRP-I)  • ring redundancy  • high speed redundancy protocol (HRP) with redundancy manager  • high speed redundancy protocol (HRP) with standby redundancy  • redundancy  • redundancy procedure STP  • redundancy procedure RSTP  • redundancy procedure RSTP  • redundancy procedure MSTP  • passive listening  • eRSTP  protocol / is supported  • LACP  system modification during operation  product function / configuration in RUN via CiR/H-CiR  product functions / security  product conformity / according to IEEE 802.1x-port based Network Access Control  protocol / is supported	Yes No No Yes Yes Yes Yes Yes No Yes No No
manager  Media Redundancy Protocol Interconnection (MRP-I)  ining redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP passive listening RRSTP  protocol / is supported LACP  system modification during operation product function / configuration in RUN via CiR/H-CiR product functions / security  product conformity / according to IEEE 802.1x-port based Network Access Control protocol / is supported RADIUS	Yes No No Yes Yes Yes Yes Yes No No No No No No
manager  Media Redundancy Protocol Interconnection (MRP-I)  ining redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP system issupported LACP system modification during operation product function / configuration in RUN via CiR/H-CiR product functions / security product conformity / according to IEEE 802.1x-port based Network Access Control protocol / is supported RADIUS SSH	Yes No No Yes Yes Yes Yes Yes No Yes No Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ining redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP redundancy procedure MSTP redundancy procedure MSTP redundancy procedure MSTP spassive listening RRSTP protocol / is supported LACP system modification during operation product functions / security  product conformity / according to IEEE 802.1x-port based Network Access Control protocol / is supported RADIUS SSH SSL	Yes No No Yes Yes Yes Yes Yes No Yes No Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ing redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP redundancy procedure RSTP+ redundancy procedure RSTP+ redundancy procedure RSTP+ redundancy procedure RSTP	Yes No No Yes Yes Yes Yes Yes No Yes No Yes
manager  Media Redundancy Protocol Interconnection (MRP-I)  ing redundancy high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy redundancy redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP redundancy procedure MSTP redundancy protocol / is supported RADIUS SSH SSL  roduct functions / time roduct functions / time	Yes No No Yes Yes Yes Yes Yes No Yes No Yes  No No No

a IEEE 1500 v2 transparent forwarding	Von
IEEE 1588 v2 transparent forwarding	Yes
protocol / is supported	V
• NTP	Yes
• SNTP	Yes
IEEE 1588 profile default	Yes
accuracy / at IEEE 1588 v2	
• not less than	100 μs
• typical	50 ns
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
UKCA marking	Yes
• cULus approval	Yes
KC approval	Yes
Regulatory Compliance Mark (RCM)	Yes
product conformity / according to EMC-guideline	2014/30/EU
standard	
• for EMC interference emission	EN 61000-6-4
for immunity to EMC	EN 61000-6-2
standards, specifications, approvals / other	
certificate of suitability	
<ul> <li>railway application in accordance with EN 50121-4</li> </ul>	Yes; use only in areas not accessible to the public
<ul> <li>railway application in accordance with EN 50125-3</li> </ul>	Yes; Section 4.2: Class AX (up to 2000m); section 4.3: T1: Containers N.T.C and T.C. / Buildings N.C.C and C.C, T2: Containers N.T.C and T.C. / Buildings N.C.C and C.C., TX: Containers N.T.C and T.C. / Buildings N.C.C and C.C., derating according to the manual must be observed when SFP/SFP+ transceivers are used; section 4.4: T1: Containers C.C. / Buildings N.C.C and C.C., T2: Containers C.C. / Buildings N.C.C and C.C., T3: Containers C.C. / Buildings N.C.C and C.C.; section 4.11: C1: Indoor, C2: Indoor (except condensation), C3: Indoor (except condensation), 4B1, 4S10, UL 62368-1, UL 61010-2-10; section 4.13: partially, Test Fc: Vibration EN 60068-2-6; IEC 60068-2-6, Test Ea: Shock EN 60068-2-27; IEC 60068-2-27, Test Ec: Rough handling, shocks EN 60068-2-31; IEC 60068-2-31; section 4.14: yes; section 4.15: yes, according to manual.
resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
IT security for industrial automation systems / according to IEC 62443-4-2:2019	Yes
standards, specifications, approvals / Environmental Product De	eclaration
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	1274.81 kg
<ul> <li>during manufacturing</li> </ul>	225.96 kg
<ul> <li>during operation</li> </ul>	1048 kg
after end of life	0.85 kg
product functions / general	
MTBF	8.6 a
reference temperature / for MTBF determination	40 °C
reference code	
• according to IEC 81346-2	KF
• according to IEC 81346-2:2019	KFE
Warranty period	5 a
product function / is supported / identification link	
further information / internet links	Yes; acc. to IEC 61406-1:2022
Turther information / internet links	Yes; acc. to IEC 61406-1:2022
internet link	Yes; acc. to IEC 61406-1:2022
internet link	
internet link  • to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
internet link  • to website: Selection guide for cables and connectors  • to web page: selection aid TIA Selection Tool	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud
internet link  • to website: Selection guide for cables and connectors  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net
internet link  • to website: Selection guide for cables and connectors  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to web page: SiePortal	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/
internet link  • to website: Selection guide for cables and connectors  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to web page: SiePortal  • to website: Image database	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb
internet link  to website: Selection guide for cables and connectors  to web page: selection aid TIA Selection Tool  to website: Industrial communication  to web page: SiePortal  to website: Image database  to website: CAx-Download-Manager	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax
internet link  • to website: Selection guide for cables and connectors  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to web page: SiePortal  • to website: Image database  • to website: CAx-Download-Manager  • to website: Industry Online Support	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb
internet link  • to website: Selection guide for cables and connectors  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to web page: SiePortal  • to website: Image database  • to website: CAx-Download-Manager	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax

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## Approvals / Certificates

**General Product Approval** 













Radio Equipment Type Approval Certificate

**Test Certificates** 

Environment

**Industrial Communication** 

<u>KC</u>

Type Test Certificates/Test Report



**PROFINET** 

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