6GK5310-0FA10-2AA3

Data sheet

product type designation



SCALANCE X310, managed plus IE switch, 3x 10/100/1000 Mbit/ and 7x 10/100 Mbit/s RJ45 ports LED diagnostics, error signaling contact with select/set pushbutton, PROFINET IO device, network management, integrated redundancy manager, office features (RSTP, VLAN, IGMP,...) C-PLUG in scope of supply.

product type designation	SCALANCE X310
transfer 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 	10
number of 10/100 Mbit/s RJ45 ports / integrated	
with securing collar	7
number of 10/100/1000 Mbit/s RJ45 ports / integrated	
with securing collar	3
interfaces / other	
number of electrical connections	
 for signaling contact 	1
for power supply	1
type of electrical connection	
 for signaling contact 	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
supply voltage / 1 / rated value	24 V
power loss [W] / 1 / rated value	9.6 W
supply voltage / 1 / rated value	18 32 V
consumed current / 1 / maximum	0.4 A
type of electrical connection / 1 / for power supply	4-pole terminal block
product component / 1 / fusing at power supply input	Yes
ambient conditions	
ambient temperature	
during operation	-40 +60 °C
during storage	-40 +70 °C

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during transport	-40 +70 °C
during transport relative humidity	-40 T/U C
at 25 °C / without condensation / during operation /	95 %
maximum	55 /s
protection class IP	IP30
design, dimensions and weights	
design	compact
width	120 mm
height	125 mm
depth	123 mm
net weight	1.4 kg
fastening method	When used in shipbuilding, installation on a 35 mm standard mounting
	rail is not permitted.
 19-inch installation 	No
 35 mm top hat DIN rail mounting 	Yes
wall mounting	Yes
• S7-300 rail mounting	Yes
S7-1500 rail mounting	No
product features, product functions, product components	
cascading in the case of a redundant ring / at reconfiguration time of <\~0.3\~s	100
cascading in cases of star topology	any (depending only on signal propagation time)
product functions / management, configuration, engineeri	
product functions / management, configuration, engineering	···9
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
PROFINET conformity class	В
product function / switch-managed	Yes
protocol / is supported	
● Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	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	
 I&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
VLAN - port based VLAN - protocol-based	No
·	
VLAN - IP-based	No
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
DHCP Option 67	Yes
product functions / redundancy	
product function	
• ring redundancy	Yes
High Speed Redundancy Protocol (HRP)	Yes
 high speed redundancy protocol (HRP) with redundancy manager 	Yes
 high speed redundancy protocol (HRP) with standby redundancy 	Yes
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
 media redundancy protocol (MRP) with redundancy manager 	Yes
redundancy procedure STP	Yes
redundancy procedure RSTP	Yes
redundancy procedure NSTP	Yes
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	
 ACL - MAC-based 	Yes
ACL - port/MAC-based	Yes
• IEEE 802.1x (radius)	Yes
broadcast/multicast/unicast limiter	Yes
broadcast blocking	Yes
protocol / is supported	
• SSH	Yes
product functions / time	
product function	Voc
SICLOCK support	Yes
protocol / is supported	v.
• NTP	Yes
• SNTP	Yes
• IEEE 1588 profile default	No
standards, specifications, approvals	
standard	
• for FM	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, Class 1, Zone 2,
	Group IIC, T4
 for safety / from CSA and UL 	UL 60950-1, CSA C22.2 No. 60950-1

for anythed interference	EN 04000 0 4:0007 (Ol A)	
for emitted interference	EN 61000-6-4:2007 (Class A)	
for interference immunity	EN 61000-6-2:2005	
MTBF reference code	40 y	
according to IEC 81346-2	KF	
• according to IEC 81346-2:2019	KFE	
standards, specifications, approvals / CE	N L	
certificate of suitability / CE marking	Yes	
standards, specifications, approvals / hazardous environn		
standard / for hazardous zone	EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X	
• from CSA and UL	UL 1604 and UL 2279-15 (Hazardous Location), CSA C22.2 No. 213- M1987, Class 1 / Division 2 / Group A, B, C, D / T4, Class 1 / Zone 2 / Group IIC / T4	
certificate of suitability		
CCC / for hazardous zone according to GB standard	Yes	
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	n	
Marine classification association		
 American Bureau of Shipping Europe Ltd. (ABS) 	Yes	
 French marine classification society (BV) 	Yes	
 Det Norske Veritas (DNV) 	No	
 Germanische Lloyd (GL) 	No	
DNV GL	Yes	
 Korean Register of Shipping (KRS) 	Yes	
 Polski Rejestr Statkow (PRS) 	Yes	
Royal Institution of Naval Architects (RINA)	No	
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	http://www.siemens.com/cax	
to website: Industry Online Support	https://support.industry.siemens.com	
security information		
security information	Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action(e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.automation.siemens.com. (V3.4)	
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