SIEMENS

Data sheet

6GK5416-4GR00-2AM2



SCALANCE XM416-4C; managed modular IE switch; 16x 10/100/1000 Mbit/s RJ45; 4x 100/1000 Mbit/s SFP; contains 4 combo ports; in total 16 ports can be used; expandable to 24 ports electrical or optical; assembly: DIN rail/S7 mounting rail, PROFINET IO device; redundancy functions; office features (RSTP, VLAN, IGMP,...); C-PLUG in scope of supply; Layer 3 integrated;

product type designation	SCALANCE XM416-4C	
transfer rate		
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s	
number of ports / maximum	24	
interfaces / for communication / maximum configuration for mo	dular devices	
number of electrical ports / maximum	24	
number of electrical ports / with PoE / maximum	8	
number of optical ports / maximum	12	
interfaces / for communication / integrated		
number of electrical connections		
 for network components or terminal equipment 	16; RJ45 with securing collar	
number of 10/100/1000 Mbit/s RJ45 ports / integrated		
with securing collar	16	
number of electrical connections		
• for SFP	4; 100 Mbit/s or 1000 Mbit/s SFP plug-in transceiver	
number of combo ports / with RJ45 interface for optical plug-in transceiver	4; 100 Mbit/s or 1000 Mbit/s SFP plug-in transceiver	
number of connectable extender modules	1	
interfaces / for communication / plug-in		
number of 10/100/1000 Mbit/s RJ45 ports		
with securing collar	8	
 with securing collar / with PoE 	8	
number of 100 Mbit/s LC ports		
for multimode	12	
• for single mode (LD)	12	
 for single mode (LH+) 	12	
 for single mode (ELH200) 	12	
number of 1000 Mbit/s LC ports		
for multimode	12	
 for single mode (LD) 	12	
 for single mode (LH) 	12	
• for single mode (LH+)	12	
• for single mode (ELH)	12	
number of electrical connections		
• for SFP	12; 100 Mbit/s or 1000 Mbit/s SFP plug-in transceiver	
interfaces / other		
number of electrical connections		
 for operator console 	1	
 for management purposes 	1	
 for signaling contact 	1	

for power supply	1
type of electrical connection	
 for operator console 	RJ11
for management purposes	RJ45
for signaling contact	2-pole terminal block
number of extender expansion interfaces	2
design of the removable storage	N
• C-PLUG	Yes
C-PLUG/KEY-PLUG	Yes
product feature / hot-swappable interface modules	Yes
signal inputs/outputs	
operating voltage / of the signaling contacts	24.1/
at DC / rated value	24 V
operational current / of the signaling contacts at DC / maximum 	0.1 A
supply voltage, current consumption, power loss	0.1 A
product component / connection for redundant voltage supply	Yes
supplied active power / of PSE / with PoE	Tes
per port / maximum	30 W
• total / maximum	180 W
type of voltage / 1 / of the supply voltage	DC
supply voltage / 1 / rated value	24 V
power loss [W] / 1 / rated value	48 W
supply voltage / 1 / rated value	19.2 28.8 V
consumed current / 1 / maximum	2 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 +70 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
relative humidity	
 at 25 °C / without condensation / during operation / 	95 %
maximum	
protection class IP	IP20
design, dimensions and weights	
design	modular
width	140 mm
height	147 mm
depth	125 mm
net weight	1.25 kg
fastening method	
 35 mm top hat DIN rail mounting 	Yes
 S7-300 rail mounting 	Yes
S7-1500 rail mounting	Yes
product features, product functions, product components / gene	eral
cascading in the case of a redundant ring / at reconfiguration time of <\~0.3\~s	50
cascading in cases of star topology	any (depending only on signal propagation time)
product functions / management, configuration, engineering	
product function	
• CLI	Yes
 web-based management 	Yes
MIB support	Yes
• TRAPs via email	Yes
configuration with STEP 7	
	Yes
RMON	Yes
RMON port mirroring	
	Yes
port mirroring	Yes Yes

PPOCHNET contermity class B product functions vinder managed Yes Integrate wheth for Element / maximum 9216 byte protoch / a supported Yes Integrat Yes Integrations Yes Integrat Yes	PROFINET IO diagnosis	Yes
Integram length // fr Ethemet / maximum 9216 byte protocol / is supported Yes • Telmet Yes • ITTP Yes • ITTP Yes • ITTP Yes • ITTP Yes • IDOP Yes • ISMM Yd Yes • ISMM Pay Yes		В
product // is supported Yes • Trinitel Yes • HTTPP Yes • HTTPB Yes • ITTPB Yes • FTP Yes • BOOTP Yes • BOOT In-Pine Ired designation Yes product function Yes • Status David Status Yes • Status David Status Yes • Status David Status Yes • Tord Status Yes • Status David Status Yes • Tord Status Yes • Status	product function / switch-managed	Yes
YesHTTPYesHTTPSYesHTTPSYesHTTPSYesHTTPSYesSBOTPYesSBOTPYesORAPYesORAPYesORAPYesSIMP v1YesSIMP v2YesSIMP v2YesSIMP v2YesSIMP v2YesSIMP v2YesSIMP v2YesSIMP v2YesSIMP v2YesSIMP v2YesSIMP v3YesSIMP v4YesSIMP v5YesSIMP v5YesSIMP v6YesSIMP v6YesSIMP v7YesSIMP v6YesSIMP v7YesSIMP v7YesSIMP v6YesSIMP v7YesSIMP v7Yes <t< td=""><td>telegram length / for Ethernet / maximum</td><td>9216 byte</td></t<>	telegram length / for Ethernet / maximum	9216 byte
HTTPYes•HTTPSYes•FTPYes•FTPYes•FRPYes•BOOTPYes•BOOTPYes•COPYes </td <td>protocol / is supported</td> <td></td>	protocol / is supported	
• HTTPSYes• FTPYes• BOOTPYes• BOOTPYes• GMRPYes• GMRPYes• GMRPYes• LDPYes• EthenheutPYes• SMMP v2Yes• SMMP v3Yes• SMMP v4Yes• SMO device specific informationYes• SMO device specific informationYes• Soluto specific informationYes• statistics packet SteeYes• statistics packet SteeYes• statistics packet SteeYes• statistics packet SteeYes• SylogYes• Soluto InnotionYes• VLAN + port basedYes• VLAN + port basedYes• VLAN + port basedYes• VLAN + St mainturn255• DHCP Opton 67Yes• DHCP Opton 71Yes• DHCP Opton 72Yes• DHCP Opton 74Yes• DHCP Opton 75Yes• Statist IP routing IntegratedYes• DHCP Opton 74Yes• Statist IP routing IntegratedYes• Statist IP routing IntegratedYes• Statist IP routing IntegratedYes• Statist IP routing Integrated <td>• Telnet</td> <td>Yes</td>	• Telnet	Yes
TTPYes• FTPYes• BOOTPYes• BOOTPYes• DCPYes• DCPYes• DCPYes• SMMP visYes• SyslopYes• SyslopYes• SyslopYes• SyslopYes• VLAN - port basedYes• DHCP Opton 78Yes•	• HTTP	Yes
• FTPYes• BOOTPYes• GMRPYes• DCPYes• LLDPYes• SMMP v1Yes• SMMP v2Yes• SMMP v3Yes• SMMP v3Yes• SMMP v3Yes• SMMP v3Yes• SMMP v4Yes• SMMP v3Yes• SMMP v3Yes• SMMP v4Yes• SMMP v4Yes• SMMP v5Yes• SMMP v5Yes• SMMP v6Yes• SystopYes• SystopYes• SystopYes• SystopYes• SystopYes• SystopYes• VLAN - port basedYes• VLAN + ProbasedYes• VLAN s - opnime / maximum285• NUMP of VLANs - opnime / maximum285• DHCP Option 82Yes• Systop of J CYPPYes• DHCP Option 82Yes• DHCP Option 82Yes• Sold UnctionYes• Static Product IncelineIP routing integrated• DHCP Option 82Yes• Static Product InvelineYes•	• HTTPS	Yes
• BOOTPYes• DOCPYes• LDPYes• LDPYes• LIMPYes• SMMP v1Yes• SMMP v2Yes• SMMP v3Yes• ISMMP v3Yes• VIAN - Protocol-basedYes• VIAN - Protocol-based	• TFTP	Yes
- AMRPYes- DCPYes- ELRPNeUPYes- ELRPNeUPYes- SNMP V1Yes- SNMP V2Yes- SNMP V3Yes- SNMP V4Yes- SNMP v6Yes- Snd statistics Packet SizeYes- UNAN - protoend-basedYes- VLAN - protoend-basedYes- VLAN - protoend / Samu255- number of VLANs - dynamic / maximum255- DHCP Option 82Yes- DHCP Option 82Yes- DHCP Option 82Yes- DHCP Option 82Yes- Static IP routing INPAYes- Static IP routing INPAYes- Static IP routing INPAYes- Static IP routing INPAYes- Static	• FTP	Yes
• DCPYes• LLDPYes• EtherNet//PYes• SINIP v1Yes• SINIP v2Yes• SINIP v3Yes• V1AN v1Protoci-basedYes• DHCP Option 8	• BOOTP	Yes
• LLDPYes• EMPN 4UPYes• SNMP V1Yes• SNMP V2Yes• SNMP V3Yes• ISMO (encoping/querier)Yes• ISMO + device specific informationYes• product functions / diagnosticsYes• product functions / diagnosticsYes• statistics packet SizeYes• SyslogYesproduct functions // LANYesproduct functions // LANYes• VLAN - protosedYes• VLAN - protosedYes• VLAN - protosedYes• VLAN - Maximum255runter of VLANs - dynamic / maximum255product functionYes• DHCP Option 82Yes• DHCP Option 83Yes• DHCP Option 83Yes• DHCP Option 83Yes• DHCP Option 84Yes• DHCP Option 85Yes• DHCP Option 86Yes• DHCP Option 87Yes• DHCP Option 86Yes• DHCP Option 87Yes• DHCP Option 86Yes• DHCP Option 86Yes• DHCP Option 87Yes• DHCP Option 86Yes• DHCP Option 86Yes<	• GMRP	Yes
• EtherNet/IPYes• SIMIP v1Yes• SIMIP v2Yes• IGMP (snoophgquer)Yes• IEdMC (acophgquer)Yes• IEdMC (acophgquer)Yes• IEdMC (acophgquer)Yes• IEdMC (acophgquer)Yes• IEdMC (acophgquer)Yes• IEdMC (acophgquer)Yesproduct function & maintenance functionYes• IEdMC (acopher)Yesproduct functions / clapnosticsYes• statistics Packet SizeYes• statistics Packet SizeYes• endr statisticsYes• endr statisticsYes• yord dagmet functionYes• VLAN - portosedYes• VLAN - IP-basedYes• VLAN - IP-basedYes• VLAN - IP-basedYes• VLAN - Option 65Yes• DHCP Option 82Yes• DHCP Option 82Yes• DHCP Option 82Yes• DHCP Option 85Yes• DHCP Option 66Yes• otatic IP routing IPv6Yes• OSFrV	• DCP	Yes
• SNMP v1Yes• SNMP v2Yes• SNMP v3Yes• Identification & maintenance functionYes• Identification & JeaporatesYes• product functionYes• statisticsYes• statistics packet typeYes• statistics packet typeYes• statistics packet typeYes• statisticsYes• statistics packet typeYes• VLAN - port basedYes• VLAN - port basedYes• VLAN - protocal functionYes• product functionYes• product functionYes• DHCP Option 63Yes• DHCP Option 66Yes• DHCP Option 67Yes• static IP routingYes• static IP routing IPv6Yes• other IPv6Yes• other IPv6Yes• other IPv6Yes• other IPv6Yes• OSFPv2Yes• O	• LLDP	Yes
• SNMP v2Yes• SNMP v3Yes• IGMP (exoping/querier)Yesidentification & maintenance functionYes• IRM0 - device-specific informationYes• RAM1 - higher level designation/location designationYesproduct functions / diagnosticsYesproduct functionsYes• exot diagnostics packet typeYes• exot function / VLANYes• VLAN - port basedYes• VLAN - port basedYes• VLAN - protocol-basedYes• VLAN - protocol-basedYes• VLAN - In-basedYes• VLAN - Indexinum255• product functionsYesproduct functionsYes• DHCP Option 62Yes• DHCP Option 63Yes• DHCP Option 64Yes• UHCP Option 65Yes• UHCP Option 66Yes• UHCP Option 67Yes• exite: IP routing IPv6Yes• otatic IP routing IPv6Yes• otatic IP routing IPv6Yes• otatic IP routing	EtherNet/IP	Yes
• SNMP v3 Yes • IGMP (encoping/querier) Yes • IGMP (encoping/querier) Yes • IBMO - device-specific information Yes • IBMO - device-specific information Yes • Product function Yes • product function Yes • product function Yes • ialiatics packet Size Yes • aliatics packet Size Yes • error statistics Yes • ordut functions / / LAN Yes product functions / / LAN Yes • aliatics packet Size Yes • systol Yes • ordut functions / / LAN Yes product functions / / LAN Yes • VLAN - port based Yes • UROP Option 82 Yes • DHCP Cleint Yes • DHCP Option 82 Yes • DHCP Option 87 Yes <td>• SNMP v1</td> <td>Yes</td>	• SNMP v1	Yes
• IGMP (snooping/querier) Yes identification & maintenance function Yes • IGMO - devices-specific information Yes product functions / lagnostics Yes product functions Yes • statistics Packet Size Yes • statistics packet type Yes • orror statistics Yes • vickan - protocol-based Yes • VLAN - protocol-based Yes • VLAN - protocol-based Yes • VLAN - IP-based Yes • VLAN - Myamin / maximum 255 number of VLANs - dynamic / maximum 255 protoci / tissupported / CVPP Yes protoci functions / DHCP Yes protoci functions / DHCP Yes protoci function / PhCP Yes protoci function / PhCP Yes protoci function / PhCP Yes protoci function	• SNMP v2	Yes
identification & maintenance function Yes i.MM - device-specific information Yes i.MM - device-specific information Yes product functions / diagnostics Yes product functions / diagnostics Yes e. ord diagnostics Yes e. etailstics packet Size Yes e. etailstics packet type Yes e. error statistics Yes error statistics Yes product functions / VLAN Yes product function vLAN - port based Yes vLAN - protocol-based Yes vLAN - protocol-based Yes vLAN - protocol-based Yes vLAN - suppratic / maximum 255 product functions / DHCP Yes product functions Yes o HHCP Option 65 Yes o HHCP Option 65 Yes orduct functions / routing Yes product function	• SNMP v3	Yes
• I&M0 - device-specific information Yes • I&M1 - higher level designation/location designation Yes product function - • port diagnostics Yes • elatistics Packet Size Yes • elatistics Packet Size Yes • elatistics packet type Yes • elatistics packet type Yes • elatistics packet type Yes • statistics packet type Yes • Syst.cg Yes product function Yes • VLAN - port based Yes • VLAN - port based Yes • VLAN - port based Yes • VLAN - IP-based Yes • VLAN - IP-based Yes • VLAN - IP-based Yes product functions / DICP	IGMP (snooping/querier)	Yes
i&M1 - higher level designation/location designation Yes product functions • port diagnostics Yes • statistics Packet Size Yes • statistics packet type Yes • error statistics Yes • error statistics Yes • ordeut functions / VLAN Yes product functions / VLAN Yes ordeut functions / VLANs / maximum 255 number of VLANs / maximum 255 product functions / DRCP Yes product function Yes • DHCP Option 82 Yes • DHCP Option 63 Yes • DHCP Option 67 Yes product function Yes • DHCP Option 67 Yes • DHCP Option 67 Yes • DHCP Option 67 Yes • OHCP Option 67	identification & maintenance function	
product functions / diagnostics • port diagnostics • estatistics packet Size • tatistics packet type • tatistics packet type • estatistics • estatistic • estatistics • estatic	 I&M0 - device-specific information 	Yes
product function Yes • part diagnostics Yes • statistics Packet Size Yes • statistics packet type Yes • error statistics Yes • statistics packet type Yes • statistics packet type Yes • statistics packet type Yes • product functions / VLAN Product functions / VLAN product functions Yes • VLAN - port based Yes • VLAN - protocol-based Yes • VLAN - IP-based Yes • VLAN - IP-based Yes • VLAN dynamic Yes number of VLANs / maximum 255 product functions / DHCP Yes product function • DHCP Option 62 Yes • DHCP Option 63 Yes • DHCP Option 64 Yes • DHCP Option 67 Yes product function • static IP routing Yes • optical function • static IP routing IPv6 Yes	 I&M1 - higher level designation/location designation 	Yes
• port diagnosticsYes• statistics Packet SizeYes• error statisticsYes• error statisticsYes• SysLogYesproduct function///////////////////////////////	product functions / diagnostics	
• statistics Packet SizeYes• statistics packet SizeYes• error statisticsYes• SysLogYesproduct functions /VLAN///////////////////////////////	product function	
• statistics packet type Yes • error statistics Yes • SysLog Yes product function //LAN • VLAN - port based Yes • Draduct function 255 product functions / DHCP Yes product functions / DHCP Yes • DHCP Option 62 Yes • DHCP Option 63 Yes • DHCP Option 66 Yes • DHCP Option 67 Yes product function IP routing integrated product function Yes • static IP routing IPv6 Yes • dynamic IP routing IPv6 Yes	 port diagnostics 	Yes
• error statistics Yes syst.og Yes product functions / VLAN • VLAN - port based Yes • VLAN - port based Yes • VLAN - protocol-based Yes • VLAN - dynamic Yes • VLAN - dynamic Yes product functions / DVP Yes • DHCP Option 62 Yes • DHCP Option 63 Yes • DHCP Option 66 Yes • DHCP Option 67 Yes product function Image: Static IP routing IPV6 * estatic IP routing IPv6 Yes • dynamic IP routing IPv6 Yes • RIPv2 Yes • RIPv3 for IPv6 Yes • OSPFv3 for IPv6 Yes	 statistics Packet Size 	Yes
• SysLogYesproduct functions / VLANproduct function• VLAN - port based• VLAN - port based• VLAN - port based• VLAN - protocol-based• VLAN - IP-based• VLAN dynamicrumber of VLANs - maximum255number of VLANs - dynamic / maximum255product functions / DICPproduct function• DHCP Option 62• DHCP Option 65• VEAP Option 667vesproduct functions / routing• static IP routing IPv6• static IP routing IPv6• dynamic IP routingYes• dynamic IP routing• static IP routing IPv6• Systend• dynamic IP routingYes• dynamic IP routingYes• dynamic IP routing IPv6• Systend• RIPv2• RIPv2• Sign Piv6• Satic IP routing IPv6• Systended• RIPv6 for IPv6• VRRP• VRRP for IPv6• VRRP• VRRP for IPv6• VRRP• VRRP for IPv6• VRRP• VRRP• VRRP for IPv6• VRRP• VRRP• VRRP• VRRP• VRRP• VRRP• VRRP• VRRP• VRRP <t< td=""><td> statistics packet type </td><td>Yes</td></t<>	 statistics packet type 	Yes
product function product function • VLAN - protocol-based • VLAN dynamic • VLAN dynamic • VLAN dynamic rumber of VLANs / maximum 255 number of VLANs - dynamic / maximum 255 product functions / DHCP product function • DHCP Option 62 • DHCP Option 66 Yes • DHCP Option 66 Yes • DHCP Option 67 yes • obtic IP routing service / routing / note istalic IP routing IPv6 yes • dynamic IP routing IPv6 yes odynamic IP routing IPv6 istalic IP routing IPv6 ves <tr< td=""><td>error statistics</td><td>Yes</td></tr<>	error statistics	Yes
product function Yes • VLAN - prot based Yes • VLAN - protocol-based Yes • VLAN - protocol-based Yes • VLAN - protocol-based Yes • VLAN dynamic Yes • VLAN dynamic Yes number of VLANs / maximum 255 number of VLANs / aximum 255 protocol / is supported / GVRP Yes product functions / DHCP Yes product function • DHCP Option 82 Yes • DHCP Option 66 Yes • DHCP Option 67 Yes product function IP routing integrated product function service / routing / note IP routing integrated product function Yes • bHCP Option 67 Yes otatic IP routing IPv6 Yes • static IP routing IPv6 Yes • dynamic IP routing IPv6 Yes • dynamic IP routing IPv6 Yes • RIPnG for IPv6 Yes • OSPFv2 Yes • OSPFv3 for IPv6 Yes • VRP Yes • VRPP Yes	• SysLog	Yes
VLAN - port basedYes·VLAN - protocol-basedYes·VLAN - IP-basedYes·VLAN dynamicYesnumber of VLANs / maximum255number of VLANs - dynamic / maximum255protocol / is supported / GVRPYesproduct functionYesDHCP Option 82YesDHCP Option 66YesDHCP Option 67Yesproduct function / o DHCP Option 67Yesservice / routing / noteIP routing integratedproduct functionYesservice / routing IPv6Yesother Drouting IPv6Yesestatic IP routing IPv6Yesodynamic IP routing IPv6Yesetter IP routing IPv6Yesprotoced / is supportedYesprotoced / washic IP routing IPv6Yesetter IPv6Yesvorting IPv6Yesvorting IPv6Yesvorting IPv6Yesvorting IPv6Yesvorted IPv6Yesvorted IPv6Yesvorted Virs IPv6Yes<	product functions / VLAN	
• VLAN - protocol-basedYes• VLAN - IP-basedYes• VLAN dynamicYesnumber of VLANs / maxinum255number of VLANs / maxinum255protocol / is supported / GVRPYesproduct functionYesproduct function S2Yes• DHCP Option 82Yes• DHCP Option 66Yes• DHCP Option 67Yesproduct functionIP routing integratedproduct functionYes• DHCP Option 67Yes• DHCP Option 67Yesproduct functionYes• product functionYes• product functionYes• product functionYes• product functionYes• product functionYes• product functionYes• static IP routingYes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• RIPv2Yes• OSPFv3 for IPv6Yes• VRRP For IPv6Yes• VRRP for IPv6Yes• VRRP for IPv6Yes	product function	
• VLAN - IP-basedYes• VLAN dynamicYesnumber of VLANs / maximum255protocol / is supported / GVRPYesproduct functions / DHCPYesproduct function 66Yes• DHCP Option 62Yes• DHCP Option 66Yes• DHCP Option 67Yesproduct functionYes• DHCP Option 67Yesproduct functionYes• DHCP Option 67Yesproduct functionYes• DHCP Option 67Yesproduct functionYesproduct functionYes• DHCP Option 67Yesproduct functionYesproduct functionYes• product functionYes• product functionYes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• RIPr04 for IPv6Yes• OSPFv3 for IPv6Yes• VRRP for IPv6Yes• VRRP for IPv6Yes	 VLAN - port based 	Yes
• VLAN dynamicYesnumber of VLANs / maximum255number of VLANs - dynamic / maximum255protocol / is supported / GVRPYesproduct functions / DHCPproduct functions / DHCP Option 82Yes• DHCP Option 66Yes• DHCP Option 67Yesproduct functions / routingService / routing / noteproduct functionIP routing integratedproduct functionYes• DHCP Option 67Yesproduct functions / routingYes• DHCP Option 67Yesproduct functions / routingYesservice / routing / noteIP routing integratedproduct functionYes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• OSPFv3 for IPv6Yes• OSPFv3 for IPv6Yes• VRRP for IPv6Yes• VRRP for IPv6Yes• VRRP for IPv6Yes	 VLAN - protocol-based 	Yes
number of VLANs / maximum255number of VLANs - dynamic / maximum255protocol / is supported / GVRPYesproduct functions / DHCPproduct function/ HCPo DHCP Option 82Yes• DHCP Option 66Yes• DHCP Option 67Yesproduct function/ Yes• DHCP Option 67Yes• DHCP Option 67Yesproduct functions / routing/ Yesservice / routing / noteIP routing integratedproduct function/ Yes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• RIPv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	VLAN - IP-based	Yes
number of VLANs - dynamic / maximum255protocol / is supported / GVRPYesproduct functions / DHCPproduct function• DHCP clientYes• DHCP Option 82Yes• DHCP Option 66Yes• DHCP Option 67Yesproduct functions / routingYesservice / routing / noteIP routing integratedproduct functionYesotting / noteYesproduct functionYesestrice / routing IPv6Yesotting IPv6Yesedynamic IP routing IPv6Yesotting IPv2YeseRIPro2YeseRIPro2Yese RIPv2Yese OSPFv2Yese OSPFv2Yese OSPFv2Yese OSPFv2Yese OSPFv2Yese VRRPYese VRRPYese VRRP for IPv6Yese VRRP for IPv6Yes	VLAN dynamic	Yes
protocol / is supported / GVRPYesproduct functions / DHCP• DHCP clientYes• DHCP Option 82Yes• DHCP Option 66Yes• DHCP Option 67Yes• DHCP Option 67Yesproduct functions / routingYesservice / routing / noteIP routing integratedproduct functionYes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• OSPFv2Yes• OSPFv2Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	number of VLANs / maximum	255
product functions / DHCPproduct function• DHCP client• DHCP Option 82• DHCP Option 66• DHCP Option 67Yes• DHCP Option 67Yesproduct functions / routingservice / routing / noteIP routing integratedproduct function• static IP routingYes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2• RIPv2• RIPv6 for IPv6• OSPFv2• OSPFv2• VRRP• VRRP for IPv6Yes• VRRP for IPv6• Ves• VRRP for IPv6• Ves	number of VLANs - dynamic / maximum	255
product function• DHCP clientYes• DHCP Option 82Yes• DHCP Option 66Yes• DHCP Option 67Yesproduct functions / routingYesservice / routing / noteIP routing integratedproduct function'Yes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	protocol / is supported / GVRP	Yes
• DHCP clientYes• DHCP Option 82Yes• DHCP Option 66Yes• DHCP Option 67Yesproduct functions / routingIP routing integratedservice / routing / noteIP routing integratedproduct functionYes• static IP routing IPv6Yes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• RIPv5Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	product functions / DHCP	
• DHCP Option 82Yes• DHCP Option 66Yes• DHCP Option 67Yesproduct functions / routingIP routing integratedservice / routing / noteIP routing integratedproduct functionYes• static IP routingYes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• RIPv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	product function	
• DHCP Option 66Yes• DHCP Option 67Yesproduct functions / routingIP routing integratedservice / routing / noteIP routing integratedproduct functionYes• static IP routing IPv6Yes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• RIPv6 for IPv6Yes• OSPFv2Yes• OSPFv2Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	DHCP client	Yes
• DHCP Option 67Yesproduct functions / routingIP routing integratedservice / routing / noteIP routing integratedproduct functionYes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• RIPv2Yes• RIPv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv3 for IPv6Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	DHCP Option 82	Yes
product functions / routingservice / routing / noteIP routing integratedproduct functionYes• static IP routing IPv6Yes• dynamic IP routingYes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• grotocol / is supportedYes• RIPv2Yes• RIPnG for IPv6Yes• OSPFv2Yes• OSPFv3 for IPv6Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	DHCP Option 66	Yes
service / routing / noteIP routing integratedproduct functionYes• static IP routing IPv6Yes• dynamic IP routingYes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yesprotocol / is supportedYes• RIPv2Yes• RIPnG for IPv6Yes• OSPFv2Yes• OSPFv3 for IPv6Yes• VRRPYes• VRRP for IPv6Yes		Yes
product functionYes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yesprotocol / is supportedYes• RIPv2Yes• RIPnG for IPv6Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv3 for IPv6Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	product functions / routing	
• static IP routingYes• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• protocol / is supportedYes• RIPv2Yes• RIPnG for IPv6Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• VRRPYes• VRRP for IPv6Yes	service / routing / note	IP routing integrated
• static IP routing IPv6Yes• dynamic IP routing IPv6Yes• dynamic IP routing IPv6Yes• protocol / is supportedYes• RIPv2Yes• RIPnG for IPv6Yes• OSPFv2Yes• OSPFv2Yes• OSPFv2Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	product function	
• dynamic IP routingYes• dynamic IP routing IPv6Yesprotocol / is supportedYes• RIPv2Yes• RIPnG for IPv6Yes• OSPFv2Yes• OSPFv3 for IPv6Yes• VRRPYes• VRRP for IPv6Yes• VRRP for IPv6Yes	static IP routing	Yes
• dynamic IP routing IPv6Yesprotocol / is supportedYes• RIPv2Yes• RIPnG for IPv6Yes• OSPFv2Yes• OSPFv2Yes• OSPFv3 for IPv6Yes• VRRPYes• VRRP for IPv6Yes	static IP routing IPv6	
protocol / is supported Yes • RIPv2 Yes • RIPnG for IPv6 Yes • OSPFv2 Yes • OSPFv3 for IPv6 Yes • VRRP Yes • VRRP for IPv6 Yes	dynamic IP routing	Yes
RIPv2YesRIPnG for IPv6YesOSPFv2YesOSPFv3 for IPv6YesVRRPYesVRRP for IPv6Yes	dynamic IP routing IPv6	Yes
• RIPnG for IPv6Yes• OSPFv2Yes• OSPFv3 for IPv6Yes• VRRPYes• VRRP for IPv6Yes		
• OSPFv2 Yes • OSPFv3 for IPv6 Yes • VRRP Yes • VRRP for IPv6 Yes	• RIPv2	Yes
• OSPFv3 for IPv6 Yes • VRRP Yes • VRRP for IPv6 Yes	RIPnG for IPv6	Yes
VRRP for IPv6 Yes Yes	OSPFv2	Yes
VRRP for IPv6 Yes	OSPFv3 for IPv6	Yes
	• VRRP	Yes
needuct functions / redundancy		Yes
product functions / redundancy	product functions / redundancy	
product function		

 of the PROFINET IO device / is supported / PROFINET system redundancy 	Yes
 ring redundancy 	Yes
	Yes
High Speed Redundancy Protocol (HRP) bigh apped redundancy protocol (HRP)	Yes
 high speed redundancy protocol (HRP) with redundancy manager 	res
 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
 Media Redundancy Protocol Interconnection (MRP-I) 	Yes
 of the PROFINET IO device / is supported / H-Sync forwarding 	Yes
 redundancy procedure STP 	Yes
 redundancy procedure RSTP 	Yes
 redundancy procedure RSTP+ 	Yes
 redundancy procedure MSTP 	Yes
passive listening	Yes
protocol / is supported	
• 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
• SSL	Yes
product functions / time	
product function	
SICLOCK support	Yes
NTP-client	Yes
SNTP client	Yes
protocol / is supported	
• NTP	Yes
• SNTP	Yes
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
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 508, UL 60950-1, CSA C22.2 Nr. 60950-1-03
for emitted interference	EN 61000-6-4 (Class A)
for interference immunity	EN 61000-6-2
MTBF	22 a
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
certificate of suitability / RoHS conformity	Yes; 2011/65/EU
standards, specifications, approvals / hazardous environments	
standard / for hazardous zone	EN 60079-0: 2009, EN60079-15: 2010, II 3 G Ex nA IIC T4 Gc, KEMA 07 ATEX
	0145 X, IECEx DEK 14.0025X
from CSA and UL	ISA 12.12.01-2012 (Hazardous Location), Class 1 / Division 2 / Group A, B, C, D / T4, Class 1 / Zone 2 / Group IIC / T4
from CSA and UL certificate of suitability	ISA 12.12.01-2012 (Hazardous Location), Class 1 / Division 2 / Group A, B, C,
	ISA 12.12.01-2012 (Hazardous Location), Class 1 / Division 2 / Group A, B, C,

• CCC / for hazardous zone according to GB standard / as
marking

Ex nA IIC T4 Gc

marking	
standards, specifications, approvals / other	
certificate of suitability	EN 61000-6-2, EN 61000-6-4
• C-Tick	Yes
KC approval	Yes
standards, specifications, approvals / marine classification	
Marine classification association	
 American Bureau of Shipping Europe Ltd. (ABS) 	Yes
 French marine classification society (BV) 	Yes
• DNV GL	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	
 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	
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