# **SIEMENS**

## Data sheet

# 6GK5206-2BD00-2AC2



SCALANCE XC206-2 manageable layer 2 IE Switch; 6x 10/100 Mbit/s RJ45 ports; 2x 100 Mbit/s SC ports; 1x console port; Diagnostic LED; Redundant power supply; Temp. range -40°C to +70 °C Mounting: Standard Mounting Rail/S7 Profile Rail/Wall; redundancy functions; office features (RSTP, VLAN ,...); PROFINET IO device Ethernet/IP-compliant C-PLUG shaft

Product type designation	SCALANCE XC206-2	
Transfer rate		
Transfer rate	10 Mbit/s, 100 Mbit/s	
Interfaces / for communication / Integrated		
Number of electrical connections		
• for network components or terminal equipment	6; RJ45	
Number of 10/100 Mbit/s RJ45 ports / Integrated		
• with securing collar	6	
Number of 100 Mbit/s SC ports		
• for multimode	2	
Interfaces / other		
Number of electrical connections		
• for operator console	1	
• for signaling contact	1	
• for power supply	1	
<ul> <li>for redundant voltage supply</li> </ul>	1	
Type of electrical connection		
• for operator console	RJ11	

design of the removable storage  • C-PLUG  Signal inputs/outputs  Operating voltage / of the signaling contacts  • at DC / Rated value  24 V	rminal block
design of the removable storage  • C-PLUG  Signal inputs/outputs  Operating voltage / of the signaling contacts  • at DC / Rated value  24 V	
C-PLUG     Yes  Signal inputs/outputs  Operating voltage / of the signaling contacts      at DC / Rated value  24 V	
Signal inputs/outputs  Operating voltage / of the signaling contacts  • at DC / Rated value  24 V	
Operating voltage / of the signaling contacts  • at DC / Rated value 24 V	
• 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 / of the supply voltage DC	
Supply voltage	
• external 24 V	
• external / minimum 9.6 V	
• external / maximum 31.2 V	
Supply voltage / 4 / Rated value	
Consumed current / 4 / at rated supply voltage / 0.25 A	
maximum	
Product component / fusing at power supply input Yes	
Fuse protection type / at input for supply voltage 2.5 A / 12	25 V
Consumed current / maximum 0.5 A	
Power loss [W]	
• at DC / at 24 V 6 W	
Ambient conditions	
Ambient temperature	
• during operation -40 +7	0 °C
• during storage -40 +8	5 °C
• during transport -40 +8	5 °C
Relative humidity	
• at 25 °C / without condensation / during 95 %	
operation / maximum	
Protection class IP IP20	
Design compact	
Width 60 mm	
Height 147 mm	
Depth 125 mm	
Net weight 0.54 kg	
Material / of the enclosure Polycarb	onate (PC-GF10) / pressure die cast aluminum
Mounting type	
• 35 mm DIN rail mounting	
• wall mounting Yes	

• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes

Product features, product functions, product components / general	
Cascading in the case of a redundant ring / at	50
reconfiguration time of <\~0.3\~s	
Cascading in cases of star topology	any (depending only on signal propagation time)
Product function / QoS according to DSCP	Yes
Product feature	
<ul> <li>Cut Through switching method</li> </ul>	No
<ul> <li>Store &amp; Forward switching method</li> </ul>	Yes

Product functions  CLI  Web-based management  MIB support  TRAPs via email  Configuration with STEP 7  RMON  SMTP server  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  HTTP  PROFINET  BOOTP  BOOTP  BOOTP  COP  LLDP  EtherNet/IP  SMMP v2  SMMP v3  Identification & maintenance function		
		engineering
web-based management     MIB support     Yes     TRAPs via email     Configuration with STEP 7     RMON     SMTP server     Port mirroring     Port mirroring     Yes     PROFINET IO diagnosis     PROFINET conformity class     PROduct function / switch-managed     Telegram length / for Ethernet / maximum     Telnet     HTTP     HTTPS     HTTPS     TFIP     BOOTP     BOMRP     DCP     LLDP     EtherNet/IP     SNMP v1     SNMP v3     SNMP v3     IGMP (snooping/querier)     Yes     SNMP v3     IGMP (snooping/querier)     Yes     SNMP v3     IGMP (snooping/querier)     Yes     SNMP v3     Yes		Vac
• MIB support         Yes           • TRAPs via email         Yes           • Configuration with STEP 7         Yes           • RMON         Yes           • SMTP server         No           • Port mirroring         Yes           • multiport mirroring         Yes           • CoS         Yes           • PROFINET IO diagnosis         Yes           PROFINET conformity class         B           Product function / switch-managed         Yes           Telegram length / for Ethernet / maximum         1632 byte           Protocol / is supported         **           • Telnet         Yes           • HTTP         Yes           • HTTP         Yes           • TFTP         Yes           • BOOTP         No           • GMRP         Yes           • DCP         Yes           • LLDP         Yes           • EtherNet/IP         Yes           • SNMP v1         Yes           • SNMP v3         Yes           • IGMP (snooping/querier)         Yes		
• TRAPs via email • Configuration with STEP 7 • RMON • SMTP server • No • Port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis • PROFINET conformity class Product function / switch-managed • Telegram length / for Ethernet / maximum • Telnet • Telnet • Telnet • HTTP • HTTPS • HTTPS • BOOTP • BOOTP • GMRP • DCP • LLDP • EtherNet/IP • SNMP v1 • SNMP v2 • SNMP v3 • IGMP (snooping/querier) • Yes • IGMP (snooping/querier) • Yes • IGMP (snooping/querier) • Yes • IGMP (snooping/querier)		
Configuration with STEP 7     RMON     Yes     No     SMTP server     No     Port mirroring     Yes     multiport mirroring     Yes     PROFINET IO diagnosis     Yes     PROFINET conformity class     Product function / switch-managed     Telegram length / for Ethernet / maximum     1632 byte  Protocol / is supported     Telnet     HTTP     Yes     HTTPS     Yes     TFTP     BOOTP     BOOTP     CGMRP     CGN     SMMP ∨1     SNMP ∨2     SNMP ∨3     IGMP (snooping/querier)     No     CGN     Yes     No     Ves     No     Configuration with STEP 7     No     Ves     Ves     No     Ves     No     Configuration with STEP 7     No     No     SMMP ∨3     IGMP (snooping/querier)     Ves     SMMP ∨1     SMMP ∨3     IGMP (snooping/querier)     Ves     SMMP ∨3     CON     Ves     Ves     SMMP ∨3     Ves     CON     Ves     Ves     SMMP ∨3     Ves     CON     Ves     Ves     SMMP ∨3     Ves     CON     Ves     Ves     CON     CON     CON     CON     Ves     CON     C		
• RMON         Yes           • SMTP server         No           • Port mirroring         Yes           • multiport mirroring         Yes           • CoS         Yes           • PROFINET IO diagnosis         Yes           PROFINET conformity class         B           Product function / switch-managed         Yes           Telegram length / for Ethernet / maximum         1632 byte           Protocol / is supported         Yes           • Telnet         Yes           • HTTP         Yes           • HTTPS         Yes           • TFTP         Yes           • BOOTP         No           • GMRP         Yes           • LLDP         Yes           • EtherNet/IP         Yes           • SNMP v1         Yes           • SNMP v2         Yes           • SNMP v3         Yes           • IGMP (snooping/querier)         Yes		
SMTP server     Port mirroring     Yes     multiport mirroring     Yes     Yes     PROFINET IO diagnosis     Yes     PROFINET conformity class     Product function / switch-managed     Telegram length / for Ethernet / maximum     Telnet     Telnet     Yes     HTTP     Yes     HTTPS     Yes     TFTP     Yes     BOOTP     No     GMRP     Yes     LLDP     Yes     EtherNet/IP     SNMP v1     SNMP v3     IGMP     SMMP v3     IGMP     SMMP v3     IGMP     SMMP vas     IGMP     Yes     IGMP     Yes     SNMP v3     IGMP     Yes     IGMP     Yes     SNMP v3     IGMP     Yes     SNMP v3     IGMP     Yes     SNMP vas     IGMP     Yes     SNMP vas     IGMP (snooping/querier)     Yes     SMMP vas     IGMP     Yes     SMMP vas     IGMP (snooping/querier)     Yes     SMMP vas     IGMP (snooping/querier)     Yes     SMMP vas     IGMP (snooping/querier)     Yes     SMMP vas     IGMP vas     SMMP vas     IGMP (snooping/querier)     Yes     SMMP vas     IGMP (snooping/querier)     Yes     SMMP vas     IGMP (snooping/querier)     Yes     SMMP vas     IGMP		
● Port mirroring         Yes           ● multiport mirroring         Yes           ● CoS         Yes           ● PROFINET IO diagnosis         Yes           PROFINET conformity class         B           Product function / switch-managed         Yes           Telegram length / for Ethernet / maximum         1632 byte           Protocol / is supported         Yes           ● Telnet         Yes           ● HTTP         Yes           ● HTTPS         Yes           ● BOOTP         No           ● GMRP         Yes           ● DCP         Yes           ● LLDP         Yes           ● EtherNet/IP         Yes           ● SNMP v1         Yes           ● SNMP v2         Yes           ● SNMP v3         Yes           ● IGMP (snooping/querier)         Yes		
<ul> <li>multiport mirroring</li> <li>CoS</li> <li>Yes</li> <li>PROFINET IO diagnosis</li> <li>Yes</li> <li>PROFINET conformity class</li> <li>B</li> <li>Product function / switch-managed</li> <li>Yes</li> <li>Telegram length / for Ethernet / maximum</li> <li>1632 byte</li> <li>Protocol / is supported</li> <li>Telnet</li> <li>Yes</li> <li>HTTP</li> <li>HTTPS</li> <li>Yes</li> <li>TFTP</li> <li>BOOTP</li> <li>GMRP</li> <li>OCP</li> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> </ul>		
	Port mirroring	
● PROFINET IO diagnosis         Yes           PROFINET conformity class         B           Product function / switch-managed         Yes           Telegram length / for Ethernet / maximum         1632 byte           Protocol / is supported         **           • Telnet         Yes           • HTTP         Yes           • HTTPS         Yes           • TFTP         Yes           • BOOTP         No           • GMRP         Yes           • LLDP         Yes           • EtherNet/IP         Yes           • SNMP v1         Yes           • SNMP v2         Yes           • SNMP v3         Yes           • IGMP (snooping/querier)         Yes	<ul><li>multiport mirroring</li></ul>	
PROFINET conformity class  Product function / switch-managed  Telegram length / for Ethernet / maximum  Protocol / is supported  • Telnet  • Telnet  • HTTP  Yes  • HTTPS  • HTTPS  • BOOTP  • BOOTP  • BOCP  • LLDP  • EtherNet/IP  • SNMP v1  • SNMP v2  • IGMP (snooping/querier)  Protocol / switch-managed  Yes  1632 byte  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Y	• CoS	Yes
Product function / switch-managed         Yes           Telegram length / for Ethernet / maximum         1632 byte           Protocol / is supported         Yes           • Telnet         Yes           • HTTP         Yes           • HTTPS         Yes           • TFTP         Yes           • BOOTP         No           • GMRP         Yes           • DCP         Yes           • LLDP         Yes           • EtherNet/IP         Yes           • SNMP v1         Yes           • SNMP v2         Yes           • SNMP v3         Yes           • IGMP (snooping/querier)         Yes	<ul> <li>PROFINET IO diagnosis</li> </ul>	Yes
Telegram length / for Ethernet / maximum  Protocol / is supported  • Telnet  • HTTP  • HTTP  • HTTPS  • TFTP  • BOOTP  • BOOTP  • DCP  • LLDP  • EtherNet/IP  • SNMP v1  • SNMP v2  • SNMP v3  • IGMP  • IGMP  • GMRP  • SNMP v3  • IGMP (snooping/querier)  1632 byte  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Y	PROFINET conformity class	В
Protocol / is supported  • Telnet  • HTTP  • HTTPS  • HTTPS  • TFTP  • BOOTP  • BOOTP  • BOCP  • LLDP  • LLDP  • EtherNet/IP  • SNMP v1  • SNMP v2  • SNMP v3  • IGMP (snooping/querier)  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye	<del>-</del>	Yes
<ul> <li>Telnet</li> <li>HTTP</li> <li>Yes</li> <li>HTTPS</li> <li>Yes</li> <li>TFTP</li> <li>BOOTP</li> <li>Mo</li> <li>GMRP</li> <li>Yes</li> <li>DCP</li> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> <li>IGMP (snooping/querier)</li> </ul>		1632 byte
<ul> <li>HTTP</li> <li>HTTPS</li> <li>Yes</li> <li>TFTP</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> </ul>	Protocol / is supported	
<ul> <li>HTTPS</li> <li>Yes</li> <li>TFTP</li> <li>BOOTP</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> </ul>	Telnet	Yes
<ul> <li>TFTP</li> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> </ul>	• HTTP	Yes
<ul> <li>BOOTP</li> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>No</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>	• HTTPS	Yes
<ul> <li>GMRP</li> <li>DCP</li> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>	• TFTP	Yes
<ul> <li>DCP</li> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>	• BOOTP	No
<ul> <li>LLDP</li> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>	• GMRP	Yes
<ul> <li>EtherNet/IP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>	• DCP	Yes
<ul> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> </ul>	• LLDP	Yes
<ul> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> </ul>	• EtherNet/IP	Yes
<ul> <li>SNMP v2</li> <li>SNMP v3</li> <li>IGMP (snooping/querier)</li> <li>Yes</li> <li>Yes</li> </ul>	• SNMP v1	Yes
• IGMP (snooping/querier) Yes	• SNMP v2	Yes
• IGMP (snooping/querier) Yes	• SNMP v3	Yes
	<ul> <li>IGMP (snooping/querier)</li> </ul>	Yes

I&M0 - device-specific information	Yes
I&M1 – higher-level designation/location	Yes
designation	
Product functions / Diagnostics	
Product function	
Port diagnostics	Yes
Statistics Packet Size	Yes
<ul> <li>Statistics packet type</li> </ul>	Yes
Error statistics	Yes
<ul><li>SysLog</li></ul>	Yes
Product functions / VLAN	
Product function	
<ul> <li>VLAN - port based</li> </ul>	Yes
<ul> <li>VLAN - protocol-based</li> </ul>	No
VLAN - IP-based	No
Number of VLANs / maximum	257
Number of VLANs - dynamic / maximum	257
Protocol / is supported / GVRP	Yes
Product functions / DHCP	
Product function	
DHCP server	Yes
DHCP client	Yes
<ul> <li>DHCP Option 82</li> </ul>	Yes
<ul> <li>DHCP Option 66</li> </ul>	Yes
DHCP Option 67	Yes
Product functions / redundancy	
Product function	
<ul> <li>of the PROFINET IO device / is supported / PROFINET system redundancy (S2)</li> </ul>	Yes
<ul> <li>Ring redundancy</li> </ul>	Yes
<ul> <li>High Speed Redundancy Protocol (HRP)</li> </ul>	Yes
<ul> <li>high speed redundancy protocol (HRP) with redundancy manager</li> </ul>	Yes
<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
• redundancy procedure STP	Yes

<ul> <li>redundancy procedure RSTP</li> </ul>	Yes
<ul> <li>redundancy procedure MSTP</li> </ul>	Yes
<ul> <li>Parallel Redundancy Protocol (PRP)/operation in the PRP-network</li> </ul>	Yes
<ul> <li>Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)</li> </ul>	No
Passive listening	Yes
Protocol / is supported	
• LACP	Yes

Product functions / Security	
Product function	
• 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
• SSL	Yes

Product functions / time	
Product function	
<ul> <li>SICLOCK support</li> </ul>	Yes
NTP-client	Yes
SNTP client	Yes
Protocol / is supported	
• NTP	Yes
• SNTP	Yes

Standards, specifications, approvals / CE	
Certificate of suitability / CE marking	Yes
Product conformity / according to EMC-guideline	2014/30/EU
Standard	
<ul> <li>for EMC interference emission</li> </ul>	EN 61000-6-4, EN 50121-4
• for immunity to EMI	EN 61000-6-2, EN 50121-4
Certificate of suitability / RoHS conformity	Yes; 2011/65/EU

Standards, specifications, approvals / hazardous environments	
Certificate of suitability	
• ATEX	Yes; EN 60079-0, EN 60079-15
• for ATEX / as marking	II 3 G Ex nA II T4 Gc
<ul><li>for ATEX / as certificate</li></ul>	KEMA 07ATEX0145 X
• IECEx	Yes; IEC 60079-0, IEC 60079-15
<ul><li>for IECEx / as marking</li></ul>	Ex nA II T4 Gc
• for IECEx / as certificate	IECEx DEK 14.0025X

for cULus HazLoc / as marking
 CL1, DIV2, Group A,B,C,D T4, CL1, Zone 2, Group IIC, T4
 for cULus HazLoc / as File Nr.
 E240480 (NWHP, NWHP7)
 Yes; FM class 3600:2011, FM class 3611:2004, FM class 3810:2005, ANSI/ISA-61010-1:2004
 for FM / as marking
 CL1, DIV2, group A,B,C,D T4, CL1, Zone 2, group IIC, T4 Ta: -

40 °C +70 °C

• for FM / as certificate FM16US0205X

# Standards, specifications, approvals / other

#### Certificate of suitability

Railway application in accordance with EN 50121-4

Yes

• Regulatory Compliance Mark (RCM)

Yes

• for UL 61010-2-201 / as File Nr.

E85972 (NRAQ, NRAQ7)

• for UL 60950-1 / as File Nr.

E115352 (NWGQ, NWGQ7)

### Standards, specifications, approvals / marine classification

#### Marine classification association

American Bureau of Shipping Europe Ltd.
 (ABS)

Yes

• Bureau Veritas (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

#### Standards, specifications, approvals / Product conformity

MTBF 46 y

#### accessories

Product extension / optional / C-PLUG

Yes

# Further information / Internet-Links

#### Internet-Link

• to website: Selector SIMATIC NET

SELECTION TOOL

http://www.siemens.com/snst

• to website: Industrial communication

 $\underline{\text{http://www.siemens.com/simatic-net}}$ 

• to website: Industry Mall

https://mall.industry.siemens.com

to website: Information and Download Center

http://www.siemens.com/industry/infocenterhttp://automation.siemens.com/bilddb

• to website: Image database

http://www.siemens.com/cax

to website: CAx Download Manager
 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. Thirdparty 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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