## **SIEMENS**

## **Data sheet**

6GK7142-7BX00-0AX0



LOGO! CMR2020 communication module for connection LOGO! 8 to GSM/GPRS network; 1 RJ45 port for Ind. Ethernet connection to LOGO! 8; 2xDI; 2xDQ; Write/read access to LOGO! tags; Text message sending/ receipt; E-mail sending; Position detection GPS; Time synchronization/ forwarding with real-time clock; Configuration/diagnostics via web interface; Remote access via OpenVPN/HTTPs, DynDNS; Observe national approval! Manual available as a download

transfer rate		
transfer rate		
at the 1st interface	10 100 Mbit/s	
<ul> <li>for GPRS transmission</li> </ul>		
— with downlink / maximum	80 kbit/s	
— with uplink / maximum	40 kbit/s	
interfaces		
number of interfaces / acc. to Industrial Ethernet	1	
number of electrical connections		
<ul> <li>at the 1st interface / acc. to Industrial Ethernet</li> </ul>	1	
<ul><li>for external antenna(s)</li></ul>	2	
<ul><li>for power supply</li></ul>	1	
number of slots		
• for SIM cards	1	
<ul> <li>for memory cards</li> </ul>	1	
type of electrical connection		
• at the 1st interface / acc. to Industrial Ethernet	RJ45 port	
type of electrical connection		
<ul><li>for external antenna(s)</li></ul>	SMA socket (50 ohms)	
for power supply	3-pole terminal block	
type of antenna		
<ul> <li>at connection 1 / connectable</li> </ul>	GPS Antenna	
<ul> <li>at connection 2 / connectable</li> </ul>	Mobile radio antenna (GPRS/GSM)	
wire length / of antenna wire / maximum	15 m	
slot version		
• for SIM card	Standard	
of the memory card	microSD	
storage capacity / of the memory card / maximum	32 Gibyte	
performance class of the memory card / minimum necessary	Class 6	
type of file system / type of file system	FAT32	
signal inputs/outputs		
number of electrical connections / for digital input signals	2	
type of electrical connection / for digital input signals	3 pole terminal block	
digital input version	not galvanically isolated, not debounced	
input voltage / at digital input		
<ul><li>with signal &lt;0&gt; / at DC</li></ul>	0 5 V	
• for signal <1> / at DC	8.5 24 V	
input current / at digital input / for signal <1> / maximum	5.5 mA	

number of electrical connections / for digital output signals	2
type of electrical connection / for digital output signals	3 pole terminal block
digital output version	transistor, not potential seperated
output voltage / at digital output	40 04 1/
• for signal <1> 1)	12 24 V
• for signal <0>	0 5 V
output current / at digital output / for signal <1> / maximum	0.3 A
wireless technology	
type of mobile wireless service	
• is supported / SMS	Yes
• is supported / GPRS	Yes
• note	GPRS (Multislot Class 10, Mobile Station Class B)
type of wireless network / is supported	V
• GSM	Yes
• UMTS	No
• LTE	No
operating frequency / for GSM transmission	850 MHz, 900 MHz, 1800 MHz, 1900 MHz
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	DC 40 04 V
supply voltage / external	12 24 V
supply voltage / external / at DC	12 24 V
supply voltage / for GPS antenna / maximum	3.8 V; at 5 mA: 3,575 V / at 10 mA: 3,35 V / at 15 mA: 3,125 V
relative positive tolerance / at DC / at 24 V	20 %
relative negative tolerance / at DC / at 12 V	10 %
onsumed current  of from external supply voltage / at DC / at 12 V /	0.25 A
maximum  ● from external supply voltage / at DC / at 24 V / maximum	0.125 A
output current / for GPS antenna / maximum	15 mA
	10 111/4
	3 W
power loss [W] ambient conditions	3 W
power loss [W] ambient conditions	3 W
power loss [W] ambient conditions ambient temperature	3 W -20 +70 °C
power loss [W]  ambient conditions  ambient temperature  • during operation	-20 +70 °C
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage	-20 +70 °C -40 +85 °C
power loss [W]  ambient conditions  ambient temperature  • during operation  • during storage  • during transport	-20 +70 °C
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage	-20 +70 °C -40 +85 °C
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation /	-20 +70 °C -40 +85 °C -40 +85 °C
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum	-20 +70 °C -40 +85 °C -40 +85 °C
power loss [W]  ambient conditions  ambient temperature  • during operation  • during storage  • during transport  relative humidity  • at 25 °C / without condensation / during operation / maximum  protection class IP	-20 +70 °C -40 +85 °C -40 +85 °C
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights	-20 +70 °C -40 +85 °C -40 +85 °C 95 %
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format width	-20 +70 °C -40 +85 °C -40 +85 °C 95 % IP20 Compact module, for rail mounting 71.5 mm
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format  width height	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm
power loss [W]  ambient conditions  ambient temperature	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format  width  height  depth  net weight	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format  width height depth net weight fastening method	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format width height depth net weight  fastening method • 35 mm top hat DIN rail mounting	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes
power loss [W]  ambient conditions  ambient temperature	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format  width height depth net weight fastening method • 35 mm top hat DIN rail mounting • wall mounting  product features, product functions, product components	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format  width height depth net weight fastening method • 35 mm top hat DIN rail mounting • wall mounting  product features, product functions, product components product function	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes / general
power loss [W]  ambient conditions  ambient temperature	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes Yes / general
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format width height depth net weight fastening method • 35 mm top hat DIN rail mounting • wall mounting  product features, product functions, product components  product function • DynDNS client	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes Yes / general
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format  width height depth net weight fastening method • 35 mm top hat DIN rail mounting • wall mounting  product features, product functions, product components  product function • DynDNS client • no-ip.com client  performance data  number of possible connections / to the LOGO! logic	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes Yes Yes Yes
power loss [W]  ambient conditions  ambient temperature  • during operation • during storage • during transport  relative humidity • at 25 °C / without condensation / during operation / maximum  protection class IP  design, dimensions and weights  module format  width height depth net weight fastening method • 35 mm top hat DIN rail mounting • wall mounting  product features, product functions, product components  product function • DynDNS client • no-ip.com client  performance data  number of possible connections / to the LOGO! logic module  number of users/telephone numbers/email addresses /	-20 +70 °C -40 +85 °C -40 +85 °C  95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes Yes Yes Yes
power loss [W]  ambient conditions  ambient temperature	-20 +70 °C -40 +85 °C -40 +85 °C 95 %  IP20  Compact module, for rail mounting 71.5 mm 90 mm 58.2 mm 0.16 kg  Yes Yes Yes Yes 1 20

number of events / for monitoring / definable / maximum	32
number of actions / definable / maximum	32
number of assignments / definable / maximum	32
number of alias SMS commands / definable / maximum	20
number of constants / definable / maximum	10
performance data / IT functions	
number of possible connections	
<ul><li>as server / by means of HTTP / maximum</li></ul>	2
as server / by means of HTTPS / maximum	2; http and https can be combined (max. number of 2 connections
- ac contain by meaning or the containing	cannot be exceeded). Max. one connection via https is possible on the
	mobile wireless interface.
as email client / maximum	1
number of free texts / for emails and SMS / maximum	20
number of characters / per free text for emails or SMS /	160
maximum	
performance data / teleservice	
product function	
<ul> <li>remote firmware update</li> </ul>	Yes
<ul> <li>remote configuration</li> </ul>	Yes
product functions / management, configuration, engineeri	ng
configuration software	
• required	Web interface
product functions / diagnostics	7133 1113111133
	Yes
product function / web-based diagnostics	res
product functions / security	
operating mode / Virtual Private Network (VPN)	Yes; Open VPN Server in PSK mode
product function / with VPN connection	OpenVPN PSK
type of encryption algorithms / with VPN connection	AES-128 CBC
type of authentication / with Virtual Private Network / PSK	Yes
type of hashing algorithms / with VPN connection	SHA-256
number of possible connections / with VPN connection	1
product function	
<ul> <li>password protection for Web applications</li> </ul>	Yes
<ul> <li>password protection for VPN</li> </ul>	Yes
encrypted data transmission	Yes
<ul> <li>switch-off of non-required services</li> </ul>	Yes
<ul> <li>log file for unauthorized access</li> </ul>	Yes
product functions / time	
product function / pass on time synchronization	Yes
	7.5 s
accuracy / of the hardware real time clock / per day / maximum	1.55
time synchronization	
• from NTP-server	Yes
• from GPS-signal	Yes
_	
<ul><li>from mobile network provider</li><li>PC</li></ul>	Yes
	Yes
manual setting	Yes
product functions / position detection	
product function	
<ul> <li>position detection with GPS</li> </ul>	Yes
pass on position data	Yes
standards, specifications, approvals / hazardous environr	nents
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
further information / internet-Links	
Internet-Link	
to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
to web page. selection and TIA Selection Tool     to website: Industrial communication	
	http://www.siemens.com/simatic-net
to website: Industry Mall     to website: Information and Download Contact	https://mall.industry.siemens.com
<ul> <li>to website: Information and Download Center</li> </ul>	http://www.siemens.com/industry/infocenter

• to website: Image database

• to website: CAx-Download-Manager

• to website: Industry Online Support

http://automation.siemens.com/bilddb

http://www.siemens.com/cax

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)

а

1) Value of the actual supply voltage

last modified:

8/3/2021