SIEMENS

Data sheet 6GK7142-7BX00-0AX0

product type designation	**CMR2020**



- - spare part - - LOGO! CMR2020 communication module for connection of LOGO! 8 to GSM/GPRS network; 1 RJ45 port for Industrial Ethernet connection to LOGO! 8; 2xDI; 2xDO; write/read access to LOGO! variables; SMS dispatch/ reception; email dispatch; 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

product brand name	LOGO!
transfer rate	
transfer rate	
● at the 1st interface	10 ... 100 Mbit/s
● for GPRS transmission	
— with downlink / maximum	80 kbit/s
— with uplink / maximum	40 kbit/s
interfaces	
number of interfaces / according to Industrial Ethernet	1
number of electrical connections	
● at the 1st interface / according to Industrial Ethernet	1
● for external antenna(s)	2
● for power supply	1
number of slots	
● for SIM cards	1
● for memory cards	1
type of electrical connection	
● at the 1st interface / according to Industrial Ethernet	RJ45 port
type of electrical connection	
● for external antenna(s)	SMA socket (50 ohms)
● for power supply	3-pole terminal block
type of antenna	
● at connection 1 / connectable	GPS Antenna
● at connection 2 / connectable	Mobile radio antenna (GPRS/GSM)
wire length / of antenna cable / 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	
● with signal <0> / at DC	0 ... 5 V
● for signal <1> / at DC	8.5 ... 24 V

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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	
● 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
● GPRS	Yes
●	GPRS (Multislot Class 10, Mobile Station Class B)
type of wireless network / is supported	
● 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
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 %
consumed current	
● from external supply voltage / at DC / at 12 V / maximum	0.25 A
● from external supply voltage / at DC / at 24 V / maximum	0.125 A
output current / for GPS antenna / maximum	15 mA
power loss [W]	3 W
ambient conditions	
ambient temperature	
● during operation	-20 ... +70 °C
● during storage	-40 ... +85 °C
● during transport	-40 ... +85 °C
relative humidity	
● at 25 °C / without condensation / during operation / maximum	95 %
protection class IP	IP20
design, dimensions and weights	
module format	Compact module, for rail mounting
width	71.5 mm
height	90 mm
depth	58.2 mm
net weight	0.16 kg
fastening method	
● 35 mm DIN-rail mounting	Yes
● wall mounting	Yes
product features, product functions, product components / general	
product function	
● DynDNS client	Yes
● no-ip.com client	Yes
performance data	
number of possible connections / to the LOGO! logic module	1
number of users/telephone numbers/email addresses / definable / maximum	20
number of user groups / definable / maximum	10
number of signals / for monitoring or device control / definable / maximum	32

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number of events / for monitoring / definable / maximum	32
number of actions / definable / maximum	32
number of coordinations / 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	
● as server / by means of HTTP / maximum	2
● as server / by means of HTTPS / maximum	2; http and https can be combined (max. number of 2 connections 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 / maximum	160
performance data / teleservice	
product function	
● remote firmware update	Yes
● remote configuration	Yes
product functions / management, configuration, engineering	
configuration software	
● required	Web interface
product functions / diagnostics	
product function / web-based diagnostics	Yes
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	
● password protection for Web applications	Yes
● password protection for VPN	Yes
● encrypted data transmission	Yes
● switch-off of non-required services	Yes
● log file for unauthorized access	Yes
product functions / time	
product function / pass on time synchronization	Yes
accuracy / of the hardware real time clock / per day / maximum	7.5 s
time synchronization	
● from NTP-server	Yes
● from GPS-signal	Yes
● from mobile network provider	Yes
● PC	Yes
● manual setting	Yes
product functions / position detection	
product function	
● position detection with GPS	Yes
● pass on position data	Yes
standards, specifications, approvals / hazardous environments / header	
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	https://www.plcbin.com/?s=6GK7142-7BX00-0AX0
● to website: Industrial communication	https://www.plcbin.com/?s=6GK7142-7BX00-0AX0
● to website: Image database	https://www.plcbin.com/?s=6GK7142-7BX00-0AX0
● to website: CAx-Download-Manager	
● to website: Industry Online Support	https://www.plcbin.com/?s=6GK7142-7BX00-0AX0

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security information

security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.plcbin.com/?s=6GK7142-7BX00-0AX0 . (V4.7)

Approvals / Certificates

General Product Approval






China RoHS




General Product Approval



China RoHS

For use in hazardous locations





FM
CCC-Ex

Radio Equipment Type Approval Certificate

Miscellaneous Miscellaneous

[1]) Value of the actual supply voltage

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