SIEMENS

Data sheet

6GK7142-7BX00-0AX0

Product type designation



LOGO! CMR2020

LOGO! CMR2020 communication Module for connection LOGO! 8 to GSM/GPRS network; 1 RJ45 port for Ind. Ethernet connection to LOGO! 8; 2xDI; 2xDO; Write/read access to LOGO! tags; sending/ receiving of text messages; E-mail sending; position detection GPS; Time synchronization/ forwarding with real time clock; configuration/diagnostics via web interface; Remote Access via OpenVPN/HTTP, DYNDNS; Observe national approval! Manual available as a download

Transmission rate

Transfer rate

- at the 1st interface
- for GPRS transmission
 - with downlink / maximum
 - with uplink / maximum

10 ... 100 Mbit/s

80 kbit/s

40 kbit/s

Interfaces	
Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
• at the 1st interface / acc. 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 / acc. to Industrial Ethernet	RJ45 port

for external antenna(s)	SMA socket (50 ohms)
• for power supply	3-pole terminal block
Type of antenna	
• at port 1 / connectable	GPS Antenna
• at port 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	Class 6
necessary	
Type of file system / Type of file system	FAT32
0	

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
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
• is supported / GPRS	Yes
• Note	GPRS (Multislot Class 10, Mobile Station Class B)
Type of mobile network / is supported	
• GSM	Yes
• UMTS	No
• LTE	No
Operating frequency	

• for GSM transmission / 850 MHz	Yes
• for GSM transmission / 900 MHz	Yes
• for GSM transmission / 1800 MHz	Yes
• for GSM transmission / 1900 MHz	Yes
• with UMTS transmission / 850 MHz	No
 with UMTS transmission / 900 MHz 	No
• with UMTS transmission / 2100 MHz	No
• for LTE transmission / 800 MHz	No
• for LTE transmission / 1800 MHz	No
• for LTE transmission / 2600 MHz	No

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 weight	
Module format	Compact module, for rail mounting
Width	71.5 mm
Height	90 mm
Depth	58.2 mm
Net weight	0.16 kg
Mounting type	
35 mm DIN rail mounting	Yes
wall mounting	Yes

Product properties, functions, components / genera	l
Product function	
DynDNS client	Yes
• no-ip.com client	Yes
Performance data	
Number of possible connections / to the LOGO! logic	1
module	
Number of users/telephone numbers/email	20
addresses / definable / maximum	
Number of user groups / definable / maximum	10
Number of signals / for monitoring or device control / definable / maximum	32
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	
• 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 e-mail client / maximum	1
Number of free texts / for e-mails and SMS / maximum	20
Performance data / Teleservice	
Product function	
Remote firmware update	Yes
• remote configuration	Yes
Product functions / management, configuration	
Configuration software	
• required	Web interface
Product functions / Diagnosis	
Product function / Web-based diagnostics	Yes
Product functions / Security	
Suitability for operation / Virtual Private Network	Yes
Operating mode Virtual Private Network / note	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 recognition	
Product function	
 position detection with GPS 	Yes
pass on position data	Yes
Further Information / Internet Links Internet-Link	
to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• 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

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¹⁾ Value of the actual supply voltage