# **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
<ul><li>for external antenna(s)</li></ul>	2
<ul><li>for power supply</li></ul>	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

<ul><li>for external antenna(s)</li></ul>	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
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Signal-Inputs/outputs	
Number of electrical connections / for digital input	2
signals	
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> /	5.5 mA
maximum	
Number of electrical connections / for digital output	2
signals	
Type of electrical connection / for digital output	3 pole terminal block
signals	
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> /	0.3 A
maximum	

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	
<ul> <li>from external supply voltage / at DC / at 12 V / maximum</li> </ul>	0.25 A
<ul> <li>from external supply voltage / at DC / at 24 V / maximum</li> </ul>	0.125 A
Output current / for GPS antenna / maximum	15 mA
Power loss [W]	3 W

Permitted ambient conditions	
Ambient temperature	
<ul><li>during operation</li></ul>	-20 +70 °C
during storage	-40 +85 °C
<ul> <li>during transport</li> </ul>	-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
<ul><li>wall mounting</li></ul>	Yes

Product properties, functions, components / genera	l .
Product function	
<ul><li>DynDNS-Client</li></ul>	Yes
• no-ip.com client	Yes
Devisions data	
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 / definable by user	20
Performance data / Teleservice	
Product function	
Remote firmware update	Yes
• remote configuration	Yes
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	1
connection	
Product function	
<ul> <li>password protection for Web applications</li> </ul>	Yes
<ul> <li>password protection for VPN</li> </ul>	Yes
<ul> <li>encrypted data transmission</li> </ul>	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
Accuracy / of the hardware real-time clock / per day /	7.5 s
maximum	
time synchronization	No.
• from NTP-server	Yes
• from GPS-signal	Yes
<ul> <li>from mobile network provider</li> </ul>	Yes
• PC	Yes
manual setting	Yes
Product functions / Position recognition	
Product function	
<ul><li>position detection with GPS</li></ul>	Yes
<ul><li>pass on position data</li></ul>	Yes
Further Information / Internet Links	
Internet-Link	
<ul> <li>to website: Selector SIMATIC NET SELECTION TOOL</li> </ul>	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

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<sup>1)</sup> Value of the actual supply voltage