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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	10 ... 100 Mbit/s
• for GPRS transmission	
— 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	
• 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 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
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

Permitted 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 / 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
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	32

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; maximum of 160 characters per user defined text

Performance data / Teleservice

Product function	
• Remote firmware update	Yes
• remote configuration	Yes
Configuration software	
• required	No, configuration by using the integrated webserver

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

08/31/2018

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

Accessories

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	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)

[1]) Value of the actual supply voltage

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