

Product type designation

LOGO! CMR2040

LOGO! CMR2040 communication module for connection LOGO! 8 to LTE 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
• for GPRS transmission	
— with downlink / maximum	85.6 kbit/s
— with uplink / maximum	85.6 kbit/s
• for LTE transmission	
— with downlink / maximum	100 Mbit/s
— with uplink / maximum	50 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet

1

Number of electrical connections

- at the 1st interface / acc. to Industrial Ethernet
- for external antenna(s)
- for power supply

1

2

1

Number of slots

- for SIM cards

1

<ul style="list-style-type: none"> • for memory cards 	1
Type of electrical connection	
<ul style="list-style-type: none"> • at the 1st interface / acc. to Industrial Ethernet 	RJ45 port
Type of electrical connection	
<ul style="list-style-type: none"> • for external antenna(s) • for power supply 	SMA socket (50 ohms) 3-pole terminal block
Type of antenna	
<ul style="list-style-type: none"> • at port 1 / connectable • at port 2 / connectable 	GPS Antenna Mobile radio antenna (GPRS/GSM, UMTS, LTE)
Wire length / of antenna cable / maximum	15 m
Slot version	
<ul style="list-style-type: none"> • for SIM card • of the memory card 	Standard microSD
Storage capacity / of the memory card / maximum	32 Gabyte
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 style="list-style-type: none"> • with signal <0> / at DC • for signal <1> / at DC 	0 ... 5 V 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	
<ul style="list-style-type: none"> • for signal <1> ¹⁾ • for signal <0> 	12 ... 24 V 0 ... 5 V
Output current / at digital output / for signal <1> / maximum	0.3 A

Wireless technology

Type of mobile wireless service	
<ul style="list-style-type: none"> • is supported / SMS • is supported / GPRS • Note 	Yes Yes LTE
Type of mobile network / is supported	

• GSM	Yes
• UMTS	Yes
• LTE	Yes
Operating frequency / for GSM transmission	900 MHz, 1800 MHz
Operating frequency / with UMTS transmission	850 MHz, 900 MHz, 2100 MHz
Operating frequency / for LTE transmission	800 MHz, 1800 MHz, 2600 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 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 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
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 style="list-style-type: none"> • as server / by means of HTTP / maximum 	2
<ul style="list-style-type: none"> • 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.
<ul style="list-style-type: none"> • as e-mail client / maximum 	1
Number of free texts / for e-mails and SMS / maximum	20
Number of characters / per free text for emails or SMS / maximum	160

Performance data / Teleservice

Product function	
<ul style="list-style-type: none"> • Remote firmware update 	Yes
<ul style="list-style-type: none"> • remote configuration 	Yes

Product functions / management, configuration, engineering

Configuration software	
<ul style="list-style-type: none"> • required 	Web interface

Product functions / Diagnostics

Product function / Web-based diagnostics	Yes
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Product functions / Security

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 style="list-style-type: none"> • password protection for Web applications 	Yes
<ul style="list-style-type: none"> • password protection for VPN 	Yes
<ul style="list-style-type: none"> • encrypted data transmission 	Yes
<ul style="list-style-type: none"> • switch-off of non-required services 	Yes
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • from NTP-server 	Yes
<ul style="list-style-type: none"> • from GPS-signal 	Yes
<ul style="list-style-type: none"> • from mobile network provider 	Yes
<ul style="list-style-type: none"> • PC 	Yes
<ul style="list-style-type: none"> • manual setting 	Yes

Product functions / Position recognition

Product function	
<ul style="list-style-type: none"> • position detection with GPS 	Yes
<ul style="list-style-type: none"> • pass on position data 	Yes

Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • 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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