

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 Gbyte
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 weights

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

Operating mode / Virtual Private Network (VPN)	Yes
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 detection

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

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¹⁾ Value of the actual supply voltage

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