

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; 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	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	1
• for external antenna(s)	2
• for power supply	1
Number of slots	
• for SIM cards	1

<ul style="list-style-type: none"> <li>• for memory cards</li> </ul>	1
Type of electrical connection	
<ul style="list-style-type: none"> <li>• at the 1st interface / acc. to Industrial Ethernet</li> <li>• for external antenna(s)</li> <li>• for power supply</li> </ul>	RJ45 port SMA socket (50 ohms) 3-pole terminal block
Type of antenna	
<ul style="list-style-type: none"> <li>• at port 1 / connectable</li> <li>• at port 2 / connectable</li> </ul>	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"> <li>• for SIM card</li> <li>• of the memory card</li> </ul>	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"> <li>• with signal &lt;0&gt; / at DC</li> <li>• for signal &lt;1&gt; / at DC</li> </ul>	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 separated
Output voltage / at digital output	
<ul style="list-style-type: none"> <li>• for signal &lt;1&gt; <sup>1)</sup></li> <li>• for signal &lt;0&gt;</li> </ul>	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"> <li>• is supported / SMS</li> <li>• is supported / GPRS</li> <li>• Note</li> </ul>	Yes Yes LTE
Type of mobile network / is supported	
<ul style="list-style-type: none"> <li>• GSM</li> </ul>	Yes

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

#### 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
- wall mounting

Yes

Yes

## Product properties, functions, components / general

### Product function

- DynDNS-Client
- no-ip.com client

Yes

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

- as server / by means of HTTP / maximum
- as server / by means of HTTPS / maximum
- as e-mail client / maximum

2

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.

1

Number of free texts for e-mails / definable by user

20

## Performance data / Teleservice

Product function

- Remote firmware update
- remote configuration

Yes

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 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	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

#### Security information

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

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