



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! variables; SMS dispatch/ receiving of text messages; email dispatch; 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	
<ul style="list-style-type: none"> <li>at the 1st interface</li> </ul>	10 ... 100 Mbit/s
<ul style="list-style-type: none"> <li>for GPRS transmission                             <ul style="list-style-type: none"> <li>with downlink / maximum</li> <li>with uplink / maximum</li> </ul> </li> </ul>	85.6 kbit/s
<ul style="list-style-type: none"> <li>for LTE transmission                             <ul style="list-style-type: none"> <li>with downlink / maximum</li> <li>with uplink / maximum</li> </ul> </li> </ul>	100 Mbit/s
	50 Mbit/s

### interfaces

number of interfaces / according to Industrial Ethernet	1
number of electrical connections	
<ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> <li>for external antenna(s)</li> <li>for power supply</li> </ul>	1 2 1
number of slots	
<ul style="list-style-type: none"> <li>for SIM cards</li> <li>for memory cards</li> </ul>	1 1
type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>	RJ45 port
type of electrical connection	
<ul style="list-style-type: none"> <li>for external antenna(s)</li> <li>for power supply</li> </ul>	SMA socket (50 ohms) 3-pole terminal block
type of antenna	
<ul style="list-style-type: none"> <li>at connection 1 / connectable</li> <li>at connection 2 / connectable</li> </ul>	GPS Antenna Mobile radio antenna (GPRS/GSM, UMTS, LTE)
wire length / of antenna wire / 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	
• for signal <1> <sup>1)</sup>	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	LTE
type of wireless 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
fastening method	
• 35 mm top hat 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
<b>performance data / IT functions</b>	
number of possible connections	2
<ul style="list-style-type: none"> <li>as server / by means of HTTP / maximum</li> <li>as server / by means of HTTPS / maximum</li> </ul>	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"> <li>as email client / maximum</li> </ul>	1
number of free texts / for emails and SMS / maximum	20
number of characters / per free text for emails or SMS / maximum	160
<b>performance data / teleservice</b>	
product function	
<ul style="list-style-type: none"> <li>remote firmware update</li> <li>remote configuration</li> </ul>	Yes Yes
<b>product functions / management, configuration, engineering</b>	
configuration software	
<ul style="list-style-type: none"> <li>required</li> </ul>	Web interface
<b>product functions / diagnostics</b>	
product function / web-based diagnostics	Yes
<b>product functions / security</b>	
operating mode / Virtual Private Network (VPN)	Yes; 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	
<ul style="list-style-type: none"> <li>password protection for Web applications</li> <li>password protection for VPN</li> <li>encrypted data transmission</li> <li>switch-off of non-required services</li> <li>log file for unauthorized access</li> </ul>	Yes Yes Yes Yes Yes
<b>product functions / time</b>	
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"> <li>from NTP-server</li> <li>from GPS-signal</li> <li>from mobile network provider</li> <li>PC</li> <li>manual setting</li> </ul>	Yes Yes Yes Yes Yes
<b>product functions / position detection</b>	
product function	
<ul style="list-style-type: none"> <li>position detection with GPS</li> <li>pass on position data</li> </ul>	Yes Yes
<b>standards, specifications, approvals / hazardous environments</b>	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> <li>to website: Industrial communication</li> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>

security information

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

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