



LOGO! CMR2020 COMMUNICATION MODULE FOR CONNECT.  
 LOGO! 0BA8 TO GSM/GPRS NET; 1 RJ45 PORT FOR IND.  
 ETHERNET-CONNECTION TO LOGO! 0BA8; 2XDI;2XDO;  
 READ/WRITE-ACCESS TO LOGO!-VARIABLES; SMS  
 SEND/RECEIVE; POSITION RECOGN. GPS; TIME SYN./FORWAR-  
 DING WITH REAL TIME CLOCK; CONFIG./DIAG.PER WEB-  
 INTERFACE; NOTE NATIONAL APPROVALS! MANUAL  
 AVAILABLE AS DOWNLOAD.

### Transmission rate

#### Transfer rate

|                                                   |                   |
|---------------------------------------------------|-------------------|
| • at the 1st interface                            | 10 ... 100 Mbit/s |
| • for GPRS transmission / with downlink / maximum | 80 kbit/s         |
| • for GPRS transmission / 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                               |
| Design of the 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 connection 1 / connectable                      | GPS Antenna                     |
| • at connection 2 / connectable                      | Mobile radio antenna (GPRS/GSM) |
| Slot version                                         |                                 |
| • for SIM card                                       | Standard                        |

|                                                          |         |
|----------------------------------------------------------|---------|
| • of the memory card                                     | microSD |
| Storage capacity / of the memory card / maximum          | 8 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                                      |
| Design of the electrical connection / for digital input signals                                                                                              | 3 pole terminal block                  |
| Digital input version                                                                                                                                        | not potential separated                |
| Input voltage / at digital input <ul style="list-style-type: none"> <li>• with signal &lt;0&gt; / for DC</li> <li>• for signal &lt;1&gt; / for DC</li> </ul> | 0 ... 5 V<br>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                                      |
| Design of the 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;</li> <li>• for signal &lt;0&gt;</li> </ul>                  | 12 ... 24 V <sup>1)</sup><br>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</li> <li>• Note</li> </ul>                                               | SMS, GPRS<br>GPRS (Multislot Class 10, Mobile Station Class B) |
| Type of mobile network / is supported                                                                                                                          | GSM                                                            |
| Operating frequency <ul style="list-style-type: none"> <li>• for GSM transmission</li> <li>• with UMTS transmission</li> <li>• for LTE transmission</li> </ul> | 850 MHz, 900 MHz, 1800 MHz, 1900 MHz                           |

#### Supply voltage, current consumption, power loss

|                                                |                                                                |
|------------------------------------------------|----------------------------------------------------------------|
| Type of voltage / of the supply voltage        | DC                                                             |
| Supply voltage / external                      | 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 / for DC / at 24 V | 20 %                                                           |
| Relative negative tolerance / for DC / at 12 V | 10 %                                                           |
| Consumed current                               |                                                                |

|                                                                                                               |         |
|---------------------------------------------------------------------------------------------------------------|---------|
| <ul style="list-style-type: none"> <li>• from external supply voltage / for DC / at 12 V / maximum</li> </ul> | 0.25 A  |
| <ul style="list-style-type: none"> <li>• from external supply voltage / for DC / at 24 V / maximum</li> </ul> | 0.125 A |
| Output current / for GPS antenna / maximum                                                                    | 15 mA   |
| Active power loss                                                                                             | 3 W     |

#### Permitted ambient conditions

|                                                                                  |                |
|----------------------------------------------------------------------------------|----------------|
| Ambient temperature                                                              |                |
| <ul style="list-style-type: none"> <li>• during operation</li> </ul>             | -20 ... +70 °C |
| <ul style="list-style-type: none"> <li>• during storage</li> </ul>               | -40 ... +85 °C |
| <ul style="list-style-type: none"> <li>• during transport</li> </ul>             | -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                                                               |                                   |
| <ul style="list-style-type: none"> <li>• 35 mm DIN rail mounting</li> </ul> | Yes                               |
| <ul style="list-style-type: none"> <li>• wall mounting</li> </ul>           | Yes                               |

#### Performance data

|                                                                            |    |
|----------------------------------------------------------------------------|----|
| Number of possible connections / to the LOGO! logic module                 | 1  |
| number of users/telephon numbers / definable / maximum                     | 20 |
| number of user groups / definable / maximum                                | 20 |
| 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 |

#### Product functions / management, configuration

|                                                              |               |
|--------------------------------------------------------------|---------------|
| Configuration software                                       |               |
| <ul style="list-style-type: none"> <li>• required</li> </ul> | WEB-Interface |

#### Product functions / Diagnosis

|                                          |     |
|------------------------------------------|-----|
| Product function / Web-based diagnostics | Yes |
|------------------------------------------|-----|

#### Product functions / Security

|                  |  |
|------------------|--|
| Product function |  |
|------------------|--|

- password protection for Web applications
- switch-off of non-required services
- log file for unauthorized access

Yes  
Yes  
Yes

#### Product functions / Time

Product function / pass on time synchronization

Yes

time synchronization

- from NTP-server
- from GPS-signal
- from mobile network provider

Yes  
Yes  
Yes

#### Product functions / Position recognition

Product function / position detection with GPS

Yes

#### Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>  
<http://www.siemens.com/simatic-net>  
<https://mall.industry.siemens.com>  
<http://www.siemens.com/automation/net/catalog>  
<http://automation.siemens.com/bilddb>  
<http://www.siemens.com/cax>  
<https://support.industry.siemens.com>

#### Security information

Security information

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

**last modified:**

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