

## Data sheet

**6GK1503-4CA01**

product type designation



## PROFIBUS OLM/P22 V4.1

PROFIBUS OLM/P22 V4.1 Optical link module with 2 RS 485 and 3 plastic FOC interfaces (4 BFOC sockets); with signaling contact and test port

|                                                                                                   |                          |
|---------------------------------------------------------------------------------------------------|--------------------------|
| transfer rate                                                                                     |                          |
| transfer rate / with PROFIBUS                                                                     | 9.6 kbit/s ... 12 Mbit/s |
| transfer rate / with PROFIBUS PA                                                                  | 45.45 kbit/s             |
| interfaces                                                                                        |                          |
| number of electrical/optical connections / for network components or terminal equipment / maximum | 4                        |
| number of electrical connections                                                                  |                          |
| • for network components or terminal equipment                                                    | 2                        |
| • for measuring device                                                                            | 1                        |
| • for signaling contact                                                                           | 1                        |
| • for power supply                                                                                | 1                        |
| type of electrical connection                                                                     |                          |
| • for network components or terminal equipment                                                    | 9-pin Sub-D socket       |
| • for measuring device                                                                            | 2-pole terminal block    |
| • for power supply and signaling contact                                                          | 5-pole terminal block    |
| design of the optical interface / for fiber optic cable                                           | BFOC port                |
| optical data                                                                                      |                          |
| propagation delay [bit]                                                                           | 6.5 bit                  |
| connectable optical power relative to 1 mW                                                        |                          |
| • of the FOC transmission link / for PCF FOC with 200/230 µm / at 10 dB/km                        | -17 dB                   |
| • of the FOC transmission link / for POF FOC with 980/1000 µm / at 230 dB/km                      | -5 dB                    |
| optical sensitivity relating to 1 mW                                                              |                          |
| • of the FOC transmission link / for PCF FOC with 200/230 µm / at 10 dB/km                        | -23 dB                   |
| wire length                                                                                       |                          |
| • for PCF FOC with 200/230 µm / at 10 dB/km / maximum                                             | 400 m                    |
| • for POF FOC with 980/1000 µm / at 230 dB/km / maximum                                           | 80 m                     |
| signal inputs/outputs                                                                             |                          |
| operating voltage / of the signaling contacts / at DC / rated value                               | 24 V                     |
| operational current / of the signaling contacts / at DC / maximum                                 | 0.1 A                    |
| supply voltage, current consumption, power loss                                                   |                          |
| type of voltage / of the supply voltage                                                           | DC                       |
| supply voltage / at DC / rated value                                                              | 24 V                     |
| supply voltage / at DC                                                                            | 18 ... 32 V              |
| product component / fusing at power supply input                                                  | Yes                      |
| consumed current / at DC / at 24 V / maximum                                                      | 0.2 A                    |
| ambient conditions                                                                                |                          |

|                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ambient temperature                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> </ul>                                                                                                                                                                              | 0 ... 60 °C<br>-40 ... +70 °C<br>-40 ... +70 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| relative humidity                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>at 25 °C / without condensation / during operation / maximum</li> </ul>                                                                                                                                                                                    | 95 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| protection class IP                                                                                                                                                                                                                                                                               | IP40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>design, dimensions and weights</b>                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| design                                                                                                                                                                                                                                                                                            | compact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| width                                                                                                                                                                                                                                                                                             | 39.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| height                                                                                                                                                                                                                                                                                            | 112 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| depth                                                                                                                                                                                                                                                                                             | 74.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| net weight                                                                                                                                                                                                                                                                                        | 0.34 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| fastening method                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>35 mm top hat DIN rail mounting</li> <li>wall mounting</li> </ul>                                                                                                                                                                                          | Yes<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>product functions / redundancy</b>                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| product function / ring redundancy                                                                                                                                                                                                                                                                | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>standards, specifications, approvals</b>                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| standard                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>for safety / from CSA and UL</li> <li>for emitted interference</li> <li>for interference immunity</li> </ul>                                                                                                                                               | UL 60950-1, CSA C22.2 Nr. 60950-1<br>EN 61000-6-4 (Class A)<br>EN 61000-6-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| certificate of suitability                                                                                                                                                                                                                                                                        | EN 61000-6-2, EN 61000-6-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <ul style="list-style-type: none"> <li>CE marking</li> <li>C-Tick</li> </ul>                                                                                                                                                                                                                      | Yes<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Marine classification association                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>French marine classification society (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Germanische Lloyd (GL)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>Nippon Kaiji Kyokai (NK)</li> </ul> | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>standards, specifications, approvals / hazardous environments</b>                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| certificate of suitability / CCC / for hazardous zone according to GB standard                                                                                                                                                                                                                    | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>standards, specifications, approvals / Environmental Product Declaration</b>                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Environmental Product Declaration                                                                                                                                                                                                                                                                 | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Global Warming Potential [CO2 eq]                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>total</li> <li>during manufacturing</li> <li>during operation</li> <li>after end of life</li> </ul>                                                                                                                                                        | 165.41 kg<br>15.09 kg<br>150.26 kg<br>0.06 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>further information / internet links</b>                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| internet link                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>to website: Image database</li> <li>to website: Industry Online Support</li> </ul>                                                                                                                                                                         | <a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a><br><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>security information</b>                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| security information                                                                                                                                                                                                                                                                              | <p>Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a>. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase</p> |

customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



EG-Konf.

[Declaration of Conformity](#)



UL



RCM

|                          |                   |
|--------------------------|-------------------|
| General Product Approval | Marine / Shipping |
|--------------------------|-------------------|



ABS



BUREAU  
VERITAS



DNV



LRS

[NK / Nippon Kaiji Kyokai](#)

|                   |             |
|-------------------|-------------|
| Marine / Shipping | Environment |
|-------------------|-------------|



PRS



RINA



[Confirmation](#)

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3/25/2024