

## Overview



Interface module for processing the communication between ET 200pro and a higher-level controller over PROFINET IO.

## Technical specifications

| Article number                                   | 6ES7154-3AB00-0AB0<br>ET200PRO, IM 154-3 PN HF                        | 6ES7154-4AB10-0AB0<br>ET200PRO, IM 154-4 PN HF                                                                                             |
|--------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Supply voltage</b>                            |                                                                       |                                                                                                                                            |
| Rated value (DC)                                 | 24 V                                                                  | 24 V                                                                                                                                       |
| Reverse polarity protection                      | Yes; against destruction                                              | Yes; against destruction                                                                                                                   |
| Short-circuit protection                         | Yes; Fuse in lower part is exchangeable, the fuse on the IM-LP is not | Yes; Fuse in lower part is exchangeable, the fuse on the IM-LP is not                                                                      |
| <b>Load voltage 2L+</b>                          |                                                                       |                                                                                                                                            |
| • Rated value (DC)                               | 24 V                                                                  | 24 V                                                                                                                                       |
| • Reverse polarity protection                    | Yes; against destruction                                              | Yes; against destruction                                                                                                                   |
| <b>Input current</b>                             |                                                                       |                                                                                                                                            |
| from supply voltage 1L+, max.                    | 300 mA                                                                | 400 mA; Dependent on terminal module, typ. maximum value for FO connection method, full load on RWB and 20.4 V input voltage               |
| <b>Power loss</b>                                |                                                                       |                                                                                                                                            |
| Power loss, typ.                                 | 5 W                                                                   | 6 W; Dependent on terminal module, typ. maximum value for CU connection method, full load on RWB, for FO the value is approx. 0.7 W higher |
| <b>Memory</b>                                    |                                                                       |                                                                                                                                            |
| Micro Memory Card                                | No; Internal memory medium                                            | No; Internal memory medium                                                                                                                 |
| <b>Address area</b>                              |                                                                       |                                                                                                                                            |
| <b>Addressing volume</b>                         |                                                                       |                                                                                                                                            |
| • Inputs                                         | 256 byte                                                              | 256 byte                                                                                                                                   |
| • Outputs                                        | 256 byte                                                              | 256 byte                                                                                                                                   |
| <b>PROFINET IO</b>                               |                                                                       |                                                                                                                                            |
| • automatic detection of transmission rate       | Yes                                                                   | Yes                                                                                                                                        |
| • Transmission rate, max.                        | 100 Mbit/s                                                            | 100 Mbit/s                                                                                                                                 |
| <b>Protocols</b>                                 |                                                                       |                                                                                                                                            |
| <b>Protocols (Ethernet)</b>                      |                                                                       |                                                                                                                                            |
| • SNMP                                           | Yes                                                                   | Yes                                                                                                                                        |
| • LLDP                                           | Yes                                                                   |                                                                                                                                            |
| • ping                                           | Yes                                                                   | Yes                                                                                                                                        |
| • ARP                                            | Yes                                                                   | Yes                                                                                                                                        |
| <b>Interrupts/diagnostics/status information</b> |                                                                       |                                                                                                                                            |
| <b>Alarms</b>                                    |                                                                       |                                                                                                                                            |
| • Diagnostic alarm                               | Yes; Parameterizable                                                  | Yes; Parameterizable                                                                                                                       |
| • Hardware interrupt                             | Yes; Parameterizable                                                  | Yes; Parameterizable                                                                                                                       |

**I/O systems**

SIMATIC ET 200 systems without control cabinet

SIMATIC ET 200pro

**Interface modules > IM 154-3 PN and IM 154-4 PN****Technical specifications (continued)**

| Article number                                           | <b>6ES7154-3AB00-0AB0</b><br>ET200PRO, IM 154-3 PN HF | <b>6ES7154-4AB10-0AB0</b><br>ET200PRO, IM 154-4 PN HF |
|----------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| <b>Diagnostics indication LED</b>                        |                                                       |                                                       |
| • MAINT LED                                              | Yes                                                   | Yes                                                   |
| • LINK LED                                               | Yes                                                   | Yes                                                   |
| • RX/TX LED                                              | Yes                                                   | Yes                                                   |
| • Bus fault BF (red)                                     | Yes                                                   | Yes                                                   |
| • Group error SF (red)                                   | Yes                                                   | Yes                                                   |
| • Monitoring 24 V voltage supply ON (green)              | Yes                                                   | Yes                                                   |
| • Load voltage monitoring 24 V DC (green)                | Yes                                                   | Yes                                                   |
| <b>Parameter</b>                                         |                                                       |                                                       |
| Swapping interrupt                                       | Parameterizable                                       | Parameterizable                                       |
| Startup if setpoint not equal to actual configuration    | Parameterizable                                       | Parameterizable                                       |
| Hot swapping of modules                                  | possible                                              | possible                                              |
| <b>Potential separation</b>                              |                                                       |                                                       |
| between backplane bus and electronics                    | No                                                    | No                                                    |
| between supply voltage and electronics                   | Yes                                                   | Yes                                                   |
| <b>Isolation</b>                                         |                                                       |                                                       |
| Isolation tested with                                    | 707 V DC (type test)                                  | 707 V DC (type test)                                  |
| <b>Degree and class of protection</b>                    |                                                       |                                                       |
| Degree of protection acc. to EN 60529                    |                                                       |                                                       |
| • IP65                                                   | Yes                                                   | Yes                                                   |
| • IP66                                                   | Yes                                                   | Yes                                                   |
| • IP67                                                   | Yes                                                   | Yes                                                   |
| <b>Ambient conditions</b>                                |                                                       |                                                       |
| <b>Ambient temperature during operation</b>              |                                                       |                                                       |
| • min.                                                   | -25 °C                                                | -25 °C                                                |
| • max.                                                   | 55 °C                                                 | 55 °C                                                 |
| <b>Ambient temperature during storage/transportation</b> |                                                       |                                                       |
| • min.                                                   | -40 °C                                                | -40 °C                                                |
| • max.                                                   | 70 °C                                                 | 70 °C                                                 |
| <b>Dimensions</b>                                        |                                                       |                                                       |
| Width                                                    | 90 mm                                                 | 135 mm                                                |
| Height                                                   | 130 mm                                                | 130 mm                                                |
| Depth                                                    | 60 mm                                                 | 60 mm                                                 |
| <b>Weights</b>                                           |                                                       |                                                       |
| Weight, approx.                                          | 375 g                                                 | 490 g                                                 |

| Ordering data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Article No.                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Article No.                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IM 154-3 PN High Feature interface module</b><br>For communication between ET 200pro and higher-level controllers over PROFINET IO; supports PROFI-safe.<br>Terminal module<br>6ES7194-4AK00-0AA0 must be ordered separately.                                                                                                                                                                                                                                                                                                                                                                                           | 6ES7154-3AB00-0AB0                                                                                                                                                                                                                                                                                | <b>7/8" sealing caps</b><br>1 pack = 10 units                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 6ES7194-3JA00-0AA0                                                                                                                                                                                                                             |
| <b>IM 154-4 PN High Feature interface module</b><br>For communication between ET 200pro and higher-level controllers over PROFINET IO; supports PROFI-safe.<br>Terminal module<br>6ES7194-4A.00-0AA0 to be ordered separately.                                                                                                                                                                                                                                                                                                                                                                                             | 6ES7154-4AB10-0AB0                                                                                                                                                                                                                                                                                | <b>7/8" connecting cable to power supply</b><br>5-wire, 5 x 1.5 mm <sup>2</sup> , trailing type, pre-assembled with two 7/8" connectors, 5-pin, up to 50 m, in various lengths:<br>1.5 m<br>2.0 m<br>3.0 m<br>5.0 m<br>10 m<br>15 m<br>Other special lengths with 90° or 180° cable outlet.                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 6XV1822-5BH15<br>6XV1822-5BH20<br>6XV1822-5BH30<br>6XV1822-5BH50<br>6XV1822-5BN10<br>6XV1822-5BN15<br>See<br><a href="http://support.automation.siemens.com/WW/view/en/26999294">http://support.automation.siemens.com/WW/view/en/26999294</a> |
| <b>Accessories</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                |
| <b>Terminal modules for IM 154-3 PN High Feature</b><br><ul style="list-style-type: none"> <li>• <b>Terminal module CM IM PN M12, 7/8" S</b> for connecting PROFINET PN and 24 V power supply to PROFINET interface modules, 2 x M12 and 2 x 7/8"</li> </ul>                                                                                                                                                                                                                                                                                                                                                               | 6ES7194-4AK00-0AA0                                                                                                                                                                                                                                                                                | <b>Power line</b><br>5-wire, 5 x 1.5 mm <sup>2</sup> , trailing type, sold by the meter, minimum order quantity 20 m, maximum order quantity 1 000 m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6XV1830-8AH10                                                                                                                                                                                                                                  |
| <b>Terminal modules for IM 154-4 PN High Feature</b><br><ul style="list-style-type: none"> <li>• <b>Terminal module CM IM PN M12, 7/8"</b> for connecting PROFINET PN and 24 V power supply to PROFINET interface modules, 2 x M12 and 2 x 7/8"</li> <li>• <b>Terminal module CM IM PN 2xRJ45</b> for connecting PROFINET PN and 24 V power supply to PROFINET interface modules, 2 x RJ45 and 2 x push-pull power connector</li> <li>• <b>Terminal module CM IM PN 2xSCRJ FO</b> for connecting PROFINET PN and 24 V power supply to PROFINET interface modules, 2 x SCRJ FO and 2 x push-pull power connector</li> </ul> | 6ES7194-4AJ00-0AA0<br><br>6ES7194-4AF00-0AA0<br><br>6ES7194-4AG00-0AA0                                                                                                                                                                                                                            | <b>7/8" cable connector</b><br>For ET 200eco, with axial cable outlet.<br><ul style="list-style-type: none"> <li>• With male insert, 5-pack</li> <li>• With female insert, 5-pack</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 6GK1905-0FA00<br>6GK1905-0FB00                                                                                                                                                                                                                 |
| <b>M12 sealing cap</b><br>For protection of unused M12 connections with ET 200pro.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3RX9802-0AA00                                                                                                                                                                                                                                                                                     | <b>Industrial Ethernet FastConnect installation cables</b><br><ul style="list-style-type: none"> <li>• <b>IE FC TP Standard Cable GP 2 x 2;</b> Sold by the meter, max. delivery unit 1 000 m; minimum order quantity 20 m.</li> <li>• <b>IE FC TP Trailing Cable 2 x 2;</b> Sold by the meter, max. order quantity 1000 m; minimum order quantity 20 m.</li> <li>• <b>IE FC TP Trailing Cable GP 2 x 2;</b> sold by the meter, max. delivery unit 1000 m; minimum order quantity 20 m.</li> <li>• <b>IE TP Torsion Cable GP 2 x 2;</b> sold by the meter, max. delivery unit 1000 m; minimum order quantity 20 m.</li> <li>• <b>IE FC TP Marine Cable 2 x 2;</b> Sold by the meter, max. order quantity 1000 m; minimum order quantity 20 m.</li> </ul> | 6XV1840-2AH10<br><br>6XV1840-3AH10<br><br>6XV1870-2D<br><br>6XV1870-2F<br><br>6XV1840-4AH10                                                                                                                                                    |
| <b>IE M12 connecting cables</b><br>Pre-assembled with two M12 connectors, up to 85 m, in various lengths:<br>0.3 m<br>0.5 m<br>1.0 m<br>1.5 m<br>2.0 m<br>3.0 m<br>5.0 m<br>10 m<br>15 m<br>Other special lengths with 90° or 180° cable outlet.                                                                                                                                                                                                                                                                                                                                                                           | 6XV1870-8AE30<br>6XV1870-8AE50<br>6XV1870-8AH10<br>6XV1870-8AH15<br>6XV1870-8AH20<br>6XV1870-8AH30<br>6XV1870-8AH50<br>6XV1870-8AN10<br>6XV1870-8AN15<br>See<br><a href="http://support.automation.siemens.com/WW/view/en/26999294">http://support.automation.siemens.com/WW/view/en/26999294</a> | <b>IE RJ45 Plug PRO</b><br>RJ45 plug connector in IP65/67-rated design for on-site assembly, plastic housing, insulation/displacement connection system, for SCALANCE X-200IRT PRO and ET 200pro:<br>1 pack = 1 unit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6GK1901-1BB10-6AA0                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                   | <b>IE SC RJ POF Plug PRO</b><br>SC RJ plug for POF fibers in IP65/67-rated design for on-site assembly, plastic housing, for SCALANCE X-200IRT PRO and ET 200pro<br>1 pack = 1 unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 6GK1900-0MB00-6AA0                                                                                                                                                                                                                             |