SIEMENS

## Data sheet 6XV1870-4GE50

| | |
|---|---|
| **product type designation** | **IE TP Cord RJ45/RJ45, 4x2** |
| product description | Patch cable, preferred length, preassembled with two RJ45 connectors (10/100/1000/10000MB) |
| | Industrial Ethernet TP cord RJ45/RJ45, Cat6a, S/FTP cable 4x2 (yellow), pre-assembled with 2 x RJ45 plugs, length 0.5 m. |



| | |
|---|---|
| product brand name | SIMATIC NET |
| Technical Product Detail Page | https://i.siemens.com/1P6XV1870-4GE50 |
| suitability for use | Easy connection of terminal devices to the IE FC cabling system |
| cable designation | S/FTP, LI 02YSCH 4x2x0,15 PIMF YL FRNC |
| wire length | 0.5 m |
| **electrical data** | |
| number of electrical connections | 2 |
| attenuation factor per length | |
| ● at 10 MHz / maximum | 0.086 dB/m |
| ● at 100 MHz / maximum | 0.28 dB/m |
| ● at 300 MHz / maximum | 0.485 dB/m |
| ● at 600 MHz / maximum | 0.675 dB/m |
| impedance | |
| ● at 1 MHz ... 100 MHz | 100 Ω |
| ● at 10 MHz … 600 MHz | 100 Ω |
| relative symmetrical tolerance | |
| ● of the characteristic impedance at 1 MHz … 100 MHz | 5 % |
| coupling loss / at 30 MHz … 100 MHz / minimum | 85 dB |
| transfer impedance per length / at 10 MHz | 10 mΩ/m |
| loop resistance per length / maximum | 290 mΩ/m |
| operating voltage | |
| ● RMS value | 80 V |
| NVP value in percent | 76 % |
| **mechanical data** | |
| number of electrical cores | 8 |
| design of the shield | S/FTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned copper wires |
| core diameter | |
| ● of AWG26 insulated conductor | 0.5 mm |
| outer diameter | |
| ● of inner conductor | 0.5 mm |
| ● of the wire insulation | 1 mm |
| ● of cable sheath | 6.2 mm |
| symmetrical tolerance of the outer diameter / of cable sheath | 0.3 mm |
| material | |
| ● of the wire insulation | polyethylene (PE) |
| ● of cable sheath | FRNC |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| color | |
| ● of the insulation of data wires | white/blue, white/orange, white/green, white/brown |
| ● of cable sheath | yellow |
| bending radius | |
| ● with single bend / minimum permissible | 31 mm |
| ● with multiple bends / minimum permissible | 62 mm |
| weight per length | 46 kg/km |
| **plug** | |
| connector type | RJ45 |
| type of plug interlock | latched |
| design of plug-in connection | RJ45-180 |
| **ambient conditions** | |
| ambient temperature | |
| ● during operation | -25 ... +80 °C |
| ● during storage | -25 ... +80 °C |
| ● during transport | -25 ... +80 °C |
| ● during installation | -25 ... +80 °C |
| ● note | In fixed installation -40 °C to 80 °C |
| fire behavior | flame resistant acc. to IEC 60332-1-2, EN 60332-3-24, smoke density acc. to IEC 61034 |
| class of burning behaviour / according to EN 13501-6 | Eca |
| chemical resistance | |
| ● to mineral oil | oil resistant according to IEC 60811-2-1 (4 h / 70°C) |
| ● to grease | Conditional resistance |
| radiological resistance / to UV radiation | not resistant |
| protection class IP | IP20 |
| **product features, product functions, product components / general** | |
| product feature | |
| ● halogen-free | Yes; halogen-free according to EN 60754-2 |
| ● PoE capability | Yes |
| ● PoE+ capability | Yes |
| ● PoE++ capability | Yes |
| ● silicon-free | Yes |
| test voltage | |
| ● at AC / core-to-core | 500 V |
| ● at AC / core shield | 1500 V |
| **standards, specifications, approvals** | |
| UL/ETL listing / 300 V Rating | No |
| UL/ETL style / 600 V Rating | Yes; E502506 AWM STYLE 21279, Wiring Harness |
| certificate of suitability | ISO/IEC 11801-1, IEC 61035 |
| ● EAC approval | Yes |
| ● UL approval | Yes |
| ● RoHS conformity | Yes |
| standard for structured cabling | Cat6A |
| Marine classification association | |
| ● American Bureau of Shipping Europe Ltd. (ABS) | No |
| ● French marine classification society (BV) | No |
| ● Det Norske Veritas (DNV) | No |
| ● Germanische Lloyd (GL) | No |
| ● Lloyds Register of Shipping (LRS) | No |
| ● Nippon Kaiji Kyokai (NK) | No |
| ● Polski Rejestr Statkow (PRS) | No |
| **further information / internet links** | |
| internet link | |
| ● to website: Selection guide for cables and connectors | https://support.industry.siemens.com/cs/ww/en/view/109766358 |
| ● to web page: selection aid TIA Selection Tool | https://www.siemens.com/tstcloud |
| ● to web page: SiePortal | https://sieportal.siemens.com/ |
| ● to website: Image database | https://www.automation.siemens.com/bilddb |
| ● to website: CAx-Download-Manager | https://www.siemens.com/cax |


© Copyright Siemens

| | |
|---|---|
| ● to website: Industry Online Support | https://support.industry.siemens.com |

**security information**

| | |
|---|---|
| security information | 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 www.siemens.com/cybersecurity-industry. 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 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**

| | | | |
|---|---|---|---|
| CE EG-Konf. | Manufacturer Declaration | Declaration of Conformity | CE EG-Konf. |

**last modified:** 8/28/2026


© Copyright Siemens