

**product type designation**

product description

**FO Standard Cable GP**

Glass fiber-optic cable, preferred length, preassembled

FO Standard Cable GP (50/125), pre-assembled with 2x2 SC connectors, insertion aid, length 80 m.



product brand name

SIMATIC NET

Technical Product Detail Page

<https://l.siemens.com/1P6XV1873-6AN80>

suitability for use

Cable for installation indoors and outdoors, UL approval

version of the assembled FO cable

Preassembled with four SC connectors

cable designation

AT-W(ZN)YY 2x1 G 50/125 OM2++

wire length

80 m

**optical data**

attenuation factor per length

- at 850 nm / maximum
- at 1300 nm / maximum

2.7 dB/km  
0.7 dB/km

bandwidth length product

- at 850 nm
- at 1300 nm

600 GHz-m  
1200 GHz-m

**mechanical data**

number of fibers / per FOC core

1

number of FO cores / per FOC cable

2

version of the FO conductor fiber

Multi-mode gradient fiber 50/125 µm, OM 2

design of the FOC core

Hollow core, filled, diameter 1400 µm

design of the fiber-optic cable

segmentable

outer diameter

- of the optical fibers
- of the optical fiber sheath
- of the FOC core sheath

50 µm  
125 µm  
2.9 mm

symmetrical deviation / of the outer diameter of the FOC core sheath

0.1 mm

width / of cable sheath

7.4 mm

thickness / of cable sheath

4.5 mm

material

- of the fiber-optic cable core
- of the optical fiber sheath
- of the FOC core sheath
- of the fiber-optic cable sheath
- of the strain relief

Quartz glass  
Quartz glass  
PVC  
PVC  
Aramid fibers

color

- of the FOC core sheath
- of cable sheath

orange/black  
green

bending radius

<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> </ul>	45 mm
<ul style="list-style-type: none"> <li>• with multiple bends / minimum permissible</li> </ul>	65 mm
tensile load	
<ul style="list-style-type: none"> <li>• during installation / short-term</li> </ul>	1200 N
<ul style="list-style-type: none"> <li>• during operation / maximum</li> </ul>	500 N
short-term shear force per length	600 N/cm
continuous shear force per length	400 N/cm
weight per length	40 kg/km
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +80 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-25 ... +80 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-25 ... +80 °C
<ul style="list-style-type: none"> <li>• during installation</li> </ul>	-5 ... +50 °C
fire behavior	flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)
chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> </ul>	conditional resistance
<ul style="list-style-type: none"> <li>• to grease</li> </ul>	conditional resistance
radiological resistance / to UV radiation	resistant
protection class IP	IP20
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> </ul>	No
<ul style="list-style-type: none"> <li>• silicon-free</li> </ul>	Yes
product component / rodent protection	No
wire length	
<ul style="list-style-type: none"> <li>• for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum</li> </ul>	5000 m
<ul style="list-style-type: none"> <li>• for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum</li> </ul>	750 m
<ul style="list-style-type: none"> <li>• for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum</li> </ul>	2000 m
<ul style="list-style-type: none"> <li>• for glass FOC / with PROFIBUS / maximum</li> </ul>	3000 m
<b>standards, specifications, approvals</b>	
certificate of suitability	
<ul style="list-style-type: none"> <li>• UL approval</li> </ul>	Yes; c(UL)us OFN FT4
<ul style="list-style-type: none"> <li>• RoHS conformity</li> </ul>	Yes
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>• to website: Industrial communication</li> </ul>	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>• to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>• to website: CAx-Download-Manager</li> </ul>	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information / header</b>	
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 <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

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Approvals / Certificates

General Product Approval



[Declaration of Conformity](#)



[Manufacturer Declaration](#)

[China RoHS](#)

General Product Approval

other

Industrial Communication



[Confirmation](#)



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