

It's crystal clear!

Fibre optic cables are the future

The advantages of fibre optic cables are obvious: they are insensitive to electromagnetic interference and do not cause any themselves. They also bridge large distances and have good eavesdropping resistance. In addition to the duplex series as multimode fibre types (OM2/3/4U), simplex cables (FTTH) as singlemode fibre types (OS2) with different connectors are also available from Wentronic. Maximum speed and maximum quality for your customers.



How lightwave technology works

In fibre optic technology, light particles take over the transmission of information and pass on the optical signal at the 'speed of light'. Fibre optic cables are a widely used type of cable in network and telecommunications technology because they are powerful and flexible.

What do we need to know about fiber optic cables?

A fiber optic cable (FOC) transmits data using optical signals. In copper wires, electrical signals move from one end to the other as electrons; in fiber optic cables, this function is carried out by photons.

Advantages and disadvantages compared to CAT cables

- > FOCs can cover large distances up to 2,000 m without amplifiers
- > they provide great bandwidth of up to 100 Gbit/s and are superior to any other cable or radio system in every discipline
- > FOCs are resistant to electromagnetic interference (EMI) and can therefore be installed as close as desired to other data lines
- > because of their plastic core (polymer optical fibers) and the lack of any need for shielding, FOCs are especially light and thin
- > in FOCs, data packets are transmitted at light speed (300,000 kph) and have very low cable propagation times
- > FOCs are more sensitive than CAT cables and can be damaged much more easily, especially by kinking
- > installation requires greater know-how and more extensive technical equipment
- > the initial costs for components and installation of a FOC network – including the test devices, switches, and the cables themselves – are higher
- > unlike the CAT area, for FOC patch cables, there are many different connector types – Goobay offers the most frequently used combinations from stock

Fiber and performance categories

Analogous to copper technology, FOCs are also broken down into uniform, standardized classes. The international specifications for fibers are found in ISO/IEC 11801 and 24702. The increasing counters OM2 (orange), OM3 (aqua), and OM4 (violet) indicate the increasing bandwidth needs from the Mbit to the Gbit range. The resulting maximum transmission distances for multimode fibers for "Ethernet" use are:

Transfer rate	Fibre type					
	Multimode					Singlemode
	OM1	OM2	OM3	OM4	OM5	OS1/OS2
100 Mbit/s	up to 2,000 m	up to 2,000 m	up to 2,000 m	up to 2,000 m	up to 2,000 m	up to 10,000 m
1 Gbit/s	up to 550 m	up to 550 m	up to 550 m	up to 1,000 m	up to 1,000 m	up to 5,000 m
10 Gbit/s	up to 30 m	up to 80 m	up to 300 m	up to 550 m	up to 550 m	up to 10,000 m
40 Gbit/s			up to 100 m	up to 125 m	up to 440 m	up to 10,000 m
100 Gbit/s			up to 70 m	up to 100 m	up to 150 m	up to 10,000 m


Singlemode fibre optic cables for an enormous range

Simplex cables (FTTH) are anything but simple. They are real all-rounders with an enormously powerful performance. In contrast to multimode fibres, singlemode fibres have a smaller diameter. This allows only one light mode to be used for transmission. With multimode, on the other hand, several light modes are transmitted. As a result, they offer low attenuation of the signal, hardly reflect any delay shifts and can bridge large distances. Get the best out of lightwave technology for your customers, because with us you will find four cable series with a total of four different connections (LC-APC, LC-UPC, SC-APC, SC-UPC).

Fibre-Optic Cable Singlemode

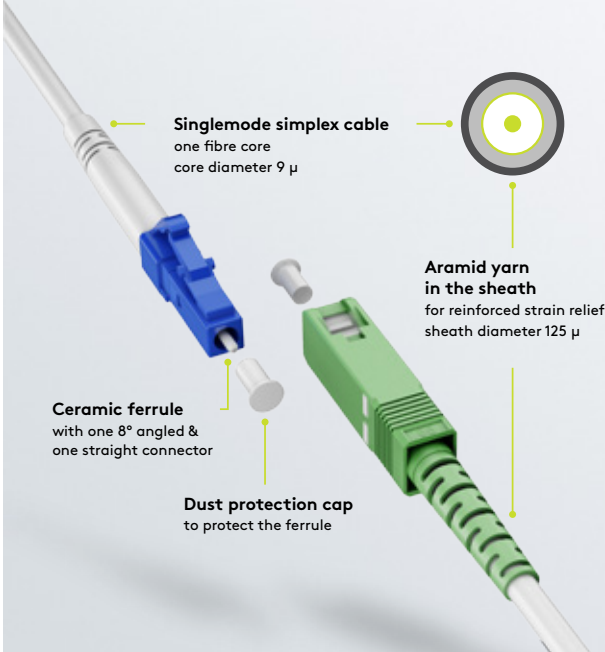
SC-APC (8°) > LC-UPC



-  Ceramic ferrule & dust caps
-  30 mm bending radius
-  Halogen-free & flame retardant
-  Aramid yarn strain relief

Fibre-Optic Cable

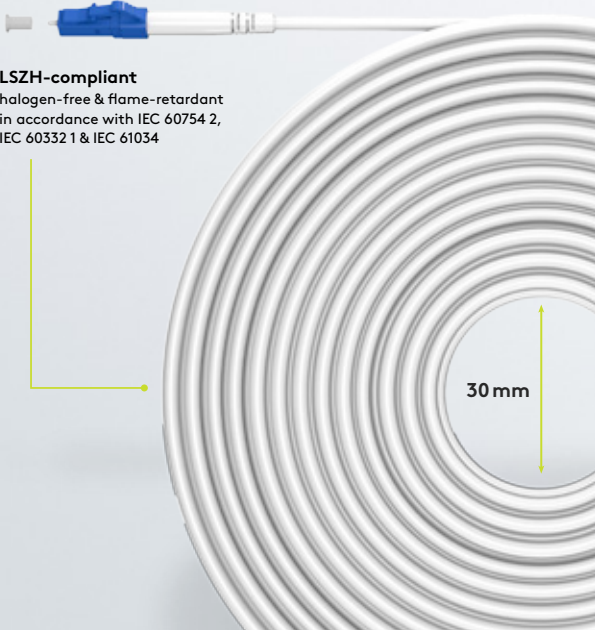
for up to 100 Gbit/s



- Singlemode simplex cable
one fibre core
core diameter 9 µ
- Aramid yarn
in the sheath
for reinforced strain relief
sheath diameter 125 µ
- Ceramic ferrule
with one 8° angled &
one straight connector
- Dust protection cap
to protect the ferrule

Bend-Optimised & Safe

for space-saving installation



LSZH-compliant
halogen-free & flame-retardant
in accordance with IEC 60754 2,
IEC 60332 1 & IEC 61034

30 mm

Singlemode

designed for connection types
such as:

-  **FTTH**
Fibre to the Home
-  **FTTB**
Fiber to the Building
-  **FTTX**
Fiber to the X



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Fibre-optic Cable (FTTH), Singlemode (OS2), (Simplex)

optical fibre (FOC), , halogen-free cable sheath (LSZH)

- mono-mode fibre optic cable designed for connection types such as FTTH, FTTB, FTTx, for use at home, in the office, in data centres etc.
- the patch cord forms the connection between the house transfer point and the Optical Network Terminal (ONT) indoors
- optical fibre cable for up to 100 Gbit/s that is bend-optimised and space-saving with a minimum bending radius of 30 mm (static)
- LSZH-compliant: cable sheath is halogen-free and flame-retardant according to IEC 60754 2. IEC 60332 1 and IEC 61034
- strain relief reinforced with aramid yarn provides extra stability
- equipped with dust protection caps, connector: Simplex,
- fibre type: OS2, SM singlemode 9/125µm according to ITU T G.657
- individual test protocol with measurement of return loss and insertion loss

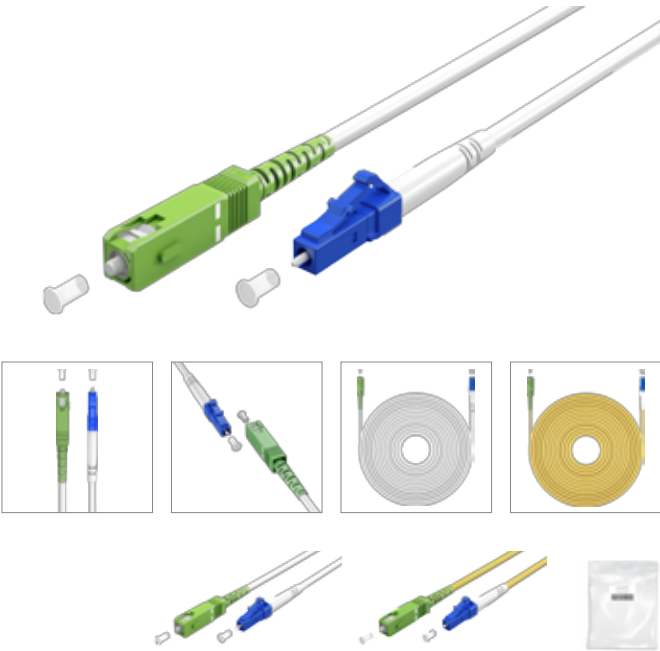
Cable type	Simplex cable
FOC core diameter	9 µ
FOC sheath diameter	125 µ
Cable sheath diameter (approx.)	3 mm
Wave length	1310 nm
Cable fiber type	Fiber optic G657.A2
Specification	Singlemode (OS2)
Kink protection	yes
Bending radius installation	30 mm
LSZH conform	yes
Operating temperature from	-40°C
Operating temperature up to	85°C

LC-APC (8°) male > LC-APC (8°) male



Cable length	White	Yellow	RPP
	Bulk	Bulk	
0.50 m	59583	59627	6.99 €
1.00 m	59584	59628	7.99 €
2.00 m	59585	59629	8.99 €
3.00 m	59586	59630	9.99 €
5.00 m	59587	59631	11.99 €
10.00 m	59588	59632	14.99 €
15.00 m	59589	59633	17.99 €
20.00 m	59590	59634	20.99 €
25.00 m	59591	59635	22.99 €
30.00 m	59592	59636	24.99 €

SC-APC (8°) male > LC-UPC male



Cable length	White	Yellow	RPP
	Bulk	Bulk	
0.50 m	59607	59647	6.99 €
1.00 m	59608	59648	7.99 €
2.00 m	59609	59649	8.99 €
3.00 m	59610	59650	9.99 €
5.00 m	59611	59651	11.99 €
10.00 m	59612	59652	14.99 €
15.00 m	59613	59653	17.99 €
20.00 m	59614	59654	20.99 €
25.00 m	59615	59655	22.99 €
30.00 m	59616	59656	24.99 €

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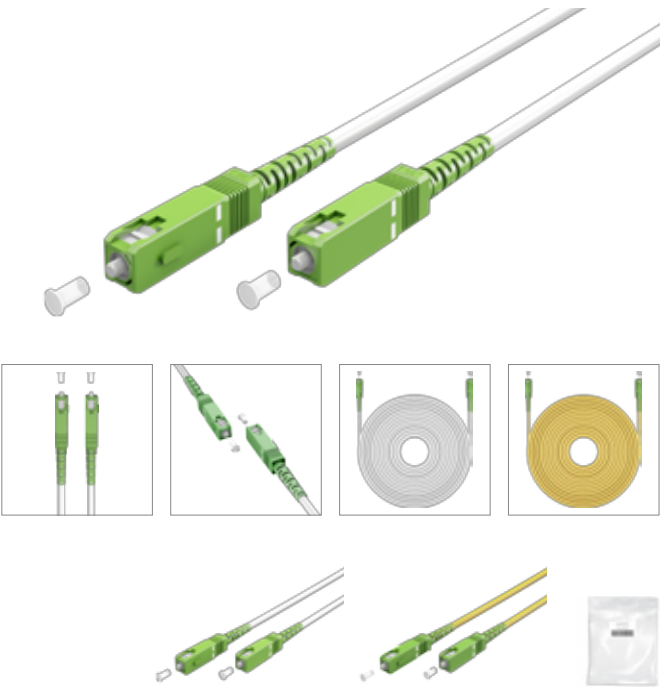
Fibre-optic Cable (FTTH), Singlemode (OS2), (Simplex)

Optical fibre (FOC), halogen-free cable sheath (LSZH)

- mono-mode fibre optic cable designed for connection types such as FTTH, FTTB, FTTx, for use at home, in the office, in data centres etc.
- the patch cord forms the connection between the house transfer point and the Optical Network Terminal (ONT) indoors
- optical fibre cable for up to 100 Gbit/s that is bend-optimised and space-saving with a minimum bending radius of 30 mm (static)
- LSZH-compliant: cable sheath is halogen-free and flame-retardant according to IEC 60754 2, IEC 60332 1 and IEC 61034
- strain relief reinforced with aramid yarn provides extra stability
- equipped with dust protection caps, connector: Simplex, fibre type: OS2, SM singlemode 9/125µm according to ITU T G.657
- individual test protocol with measurement of return loss and insertion loss

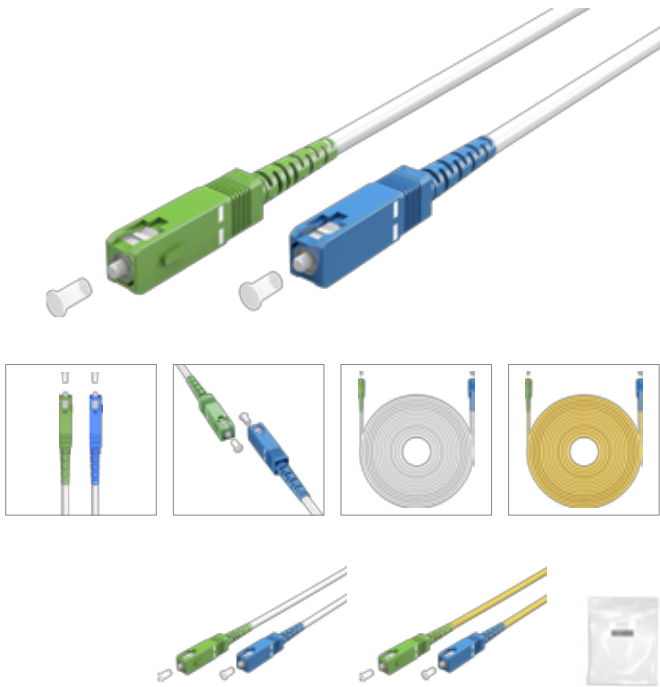
Cable type	Simplex cable
FOC core diameter	9 µ
FOC sheath diameter	125 µ
Cable sheath diameter (approx.)	3 mm
Wave length	1310 nm
Cable fiber type	Fiber optic G657.A2
Specification	Singlemode (OS2)
Kink protection	yes
Bending radius installation	30 mm
LSZH conform	yes
Operating temperature from	-40°C
Operating temperature up to	85°C

SC-APC male > SC-APC male



Cable length	White	Yellow	RPP
	Bulk	Bulk	
0.50 m	59593	59637	6.99 €
1.00 m	59594	59638	7.99 €
2.00 m	59595	59639	8.99 €
3.00 m	59596	59640	9.99 €
5.00 m	59597	59641	11.99 €
10.00 m	59598	59642	14.99 €
15.00 m	59599	59643	17.99 €
20.00 m	59604	59644	20.99 €
25.00 m	59605	59645	22.99 €
30.00 m	59606	59646	24.99 €

SC-APC (8°) male > SC-UPC male,



Cable length	White	Yellow	RPP
	Bulk	Bulk	
0,50 m	59617	59657	6.99 €
1,00 m	59618	59658	7.99 €
2,00 m	59619	59659	8.99 €
3,00 m	59620	59660	9.99 €
5,00 m	59621	59661	11.99 €
10,00 m	59622	59662	14.99 €
15,00 m	59623	59663	17.99 €
20,00 m	59624	59664	20.99 €
25,00 m	59625	59665	22.99 €
30,00 m	59626	59666	24.99 €

There is more in duplex cables (multimode fibre)!

Duplex fibre optic cables consist of two fibres that are connected to each other at the cable sheath. This makes them ideal for industrial applications, such as telecommunications technology.

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Fibre Optic Cable, Multimode (OM3) Aqua

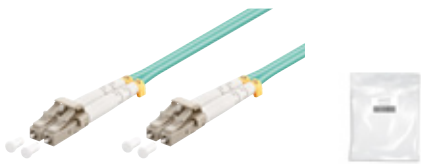
optical fibre (FOC), halogen-free cable sheath (LSZH)

- Connection and patch cable terminated on both ends with fibre-optic connectors to link network components
- The high-quality optical fibre provides an excellent and powerful Ethernet connection.
- Fibre Ethernet cables are used for network cabling in server rooms and data centres, in telecommunications technology as well as in the industry
- Stable, halogen-free cable sheathing (LSZH) protects the optical fibre cable in case of fire and provides long functional maintenance
- LC to LC fibre cable is equipped with removable dust caps
- Bend protection and stable sheathing effectively protect the fibre-optic cable from breakage
- Fibre cable is supplied with a test report

Cable type	Duplex cable
FOC core diameter	50 µ
FOC sheath diameter	125 µ
Cable sheath diameter (approx.)	2.8 mm
Wave length	850 nm
Cable fiber type	Glass fiber-optic cables
Kink protection	yes
Bending radius >	30 mm
LSZH conform	yes
Operating temperature from	-20°C
Operating temperature up to	60°C

Multimode (OM3) Aqua

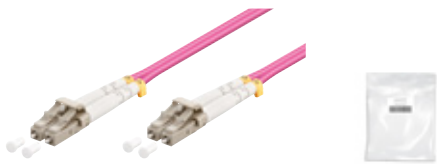
LC-UPC male > LC-UPC male



Cable length	Bulk	RRP
0.50 m	95750	12.99 €
1.00 m	95751	13.99 €
2.00 m	93385	14.99 €
3.00 m	95752	15.99 €
5.00 m	95753	18.99 €
7.50 m	95754	23.99 €
10.00 m	95755	24.99 €
15.00 m	95756	27.99 €
20.00 m	95757	39.99 €

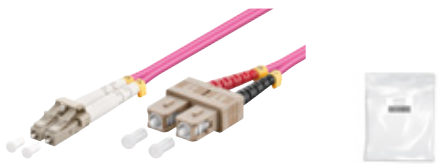
Multimode (OM4) Violett

LC-UPC male > LC-UPC male



Cable length	Bulk	RRP
0.50 m	95933	12.99 €
1.00 m	95934	14.99 €
2.00 m	95935	17.99 €
3.00 m	95936	19.99 €
5.00 m	95937	23.99 €
7.50 m	95938	29.99 €
10.00 m	95939	34.99 €
15.00 m	95940	39.99 €
20.00 m	95941	49.99 €

LC-UPC male > SC-UPC male



Cable length	Bulk	RRP
0.50 m	95942	12.99 €
1.00 m	95943	14.99 €
2.00 m	95944	16.99 €
3.00 m	95945	18.99 €
5.00 m	95946	23.99 €
10.00 m	95948	34.99 €

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Keystone Fibre-Optic Cable Module

17.2 mm width, 2 LC-Duplex female



- Made of robust plastic housing for a long service life
- Optical fibre socket for installation in Keystone patch panels, Ethernet sockets and housings
- Usage e.g. in laboratories, workshops, home entertainment and network installations
- Fibre-optic connection with easy snap-in mounting
- High-quality contacts guarantee an excellent and powerful network connection
- High-quality LC duplex connector to link fibre-optic cables



80000 Bulk

RRP

2.99 €



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Keystone Fibre-Optic Cable Module

17 mm width, 2 SC-Simplex female



- Made of robust plastic housing for a long service life
- Optical fibre socket for installation in Keystone patch panels, Ethernet sockets and housings
- Usage e.g. in laboratories, workshops, home entertainment and network installations
- Fibre-optic connection with easy snap-in mounting
- High-quality contacts guarantee an excellent and powerful network connection
- SC simplex connector to link fibre-optic cables



80017 Bulk

RRP

2.99 €



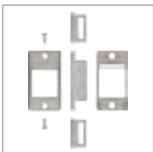
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Keystone Holder/Bezel for Device Installation

Suitable for 19.2 x 14.9 mm Keystone port



- The Keystone frame can be installed in housings and is suitable for easy snap-in mounting of individual Keystone modules.
- Integrated labelling field for clear structuring of the connectors
- Keystone mount made of robust die-cast zinc
- Comes with 2 pilot holes for fastening with screws at a distance of 28.9 mm
- Scope of delivery includes 2x screws for fastening



79883 Bulk

RRP

2.99 €



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19 Inch (48.3 cm) Blank Keystone Patch Panel (STP) (1 U), with earthing cable

for 24x Keystone modules



- Shielded 24-port patch panel for an easy snap-in mounting of shielded and unshielded Keystone modules (not included)
- Suitable for all Keystone modules such as RJ45 sockets for connecting network cables
- Made of robust, powder-coated steel with a nickel-plated mounting plate, for installation in a 19-inch network cabinet or wall-mounted housing
- With removable support bar and 24 cable ties for holding the connected network cables in place
- Black distribution panel with numbered ports and labelling field for a neat cable management
- Incl. earthing cable for connection to the protective earth (PE) against potential overvoltages and static charging
- Incl. mounting material and screws

95743 Bulk

RRP

14.99 €

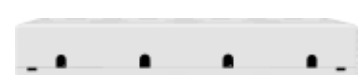


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Keystone Empty Housing

with easy snap-in assembly

- Distributor for easy snap-in mounting of 1x| 2x| 4x| 6x| 8x Keystone module (not included in scope of delivery)
- Empty housing for equipping with e.g. RJ45 sockets and for connecting network cables
- Used, for example, in laboratories and workshops, in home entertainment and in network installations.
- Patch panel incl. fixing screws and cable tie for mounting on wall and desktop
- Port with 180° cable routing



1 port

2 port

4 port

6 port

8 port

79355 Bulk

79366 Bulk

79376 Bulk

79379 Bulk

79426 Bulk

RRP

2.99 €

RRP

3.49 €

RRP

3.99 €

RRP

4.49 €

RRP

4.99 €



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Faceplate to Mount Keystone Jacks

for 2x RJ45 snap-in modules



- Ethernet wall socket with 2x ports for Keystone RJ45 jack sockets
- May be used as a flush-mounted box or surface-mounted box
- Thanks to the snap-in system, the Keystone modules can be effortlessly snapped into the mounting frame
- The modules can be easily removed from the data socket and exchanged with other connectors.
- RJ45 wall socket with dust protection caps for a reliable internet connection
- Thanks to the simple design, the RJ45 faceplate is ideally suited for offices, living rooms or hobby areas.
- 2-port Ethernet wall box with white outer frame sized 80 x 80 mm. Surface mounting frame not included in the scope of delivery.

95902 Bulk

RRP

6.49 €



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Keystone On-Wall Mounting Frame

suitable for Keystone faceplate 80 x 80 and CAT 6/6A flush-mounted boxes



- The surface-mounted housing is compatible with a 2-port Ethernet wall socket for Keystone RJ45 connectors.
- May be used as a flush-mounted box or surface-mounted box
- Housing for Keystone Ethernet wall box with an outer frame of 80 x 80 mm
- Scope of delivery includes 2x screws for fastening.

96502 Bulk

RRP

3.49 €

