



ITTELECOM

WE DELIVER TECHNOLOGY
INNOVATIONS WITH

THE HIGHEST
QUALITY STANDARDS



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ITTELECOM SYSTEM

Innovation & Cost

BrightCore - a composite of thermoplastic and FRP Soft, flexible and easy to strip and install Superior thermal and mechanical performance Small in size and low weight Highly economical and low-cost cables



Quality

High Quality Materials e.g. Corning Fiber & US-Conec MTP Rigorous Quality Management & State-Of-The-Art Factory



Customization & Flexibility

Joint R&D Services with Customers
Production according to individual requirements



Response

Short Lead-Time: 1 — 4 Weeks
Short PO Turn-Around (< 24 hours)
Customer Attention and Excellent Logistics



PRODUCT PORTFOLIO

FTTH

BrightCore series: indoor cable, outdoor cable, ADSS cable, universal cable

Field-installable connectors

Optical Distribution Frames

FO outlets

Pre-assembled cable systems

FTTA

CPRI cable

Glass-yarn distribution cable

ODVA connector

Powered Optical Cable System (POCS)

POC Indoor Termination Box

POC Extender

POC Inector & Connector

DATA CENTER

Patch Cords, MTP trunk cables

Zone distribution modules and panels Pre-assembled fan-outs and cable systems

Installation cables

PASSIVE COMPONENTS

Connectors and Adaptors

Splitters

Attenuators

Cables

PRODUCTION EQUIPMENT

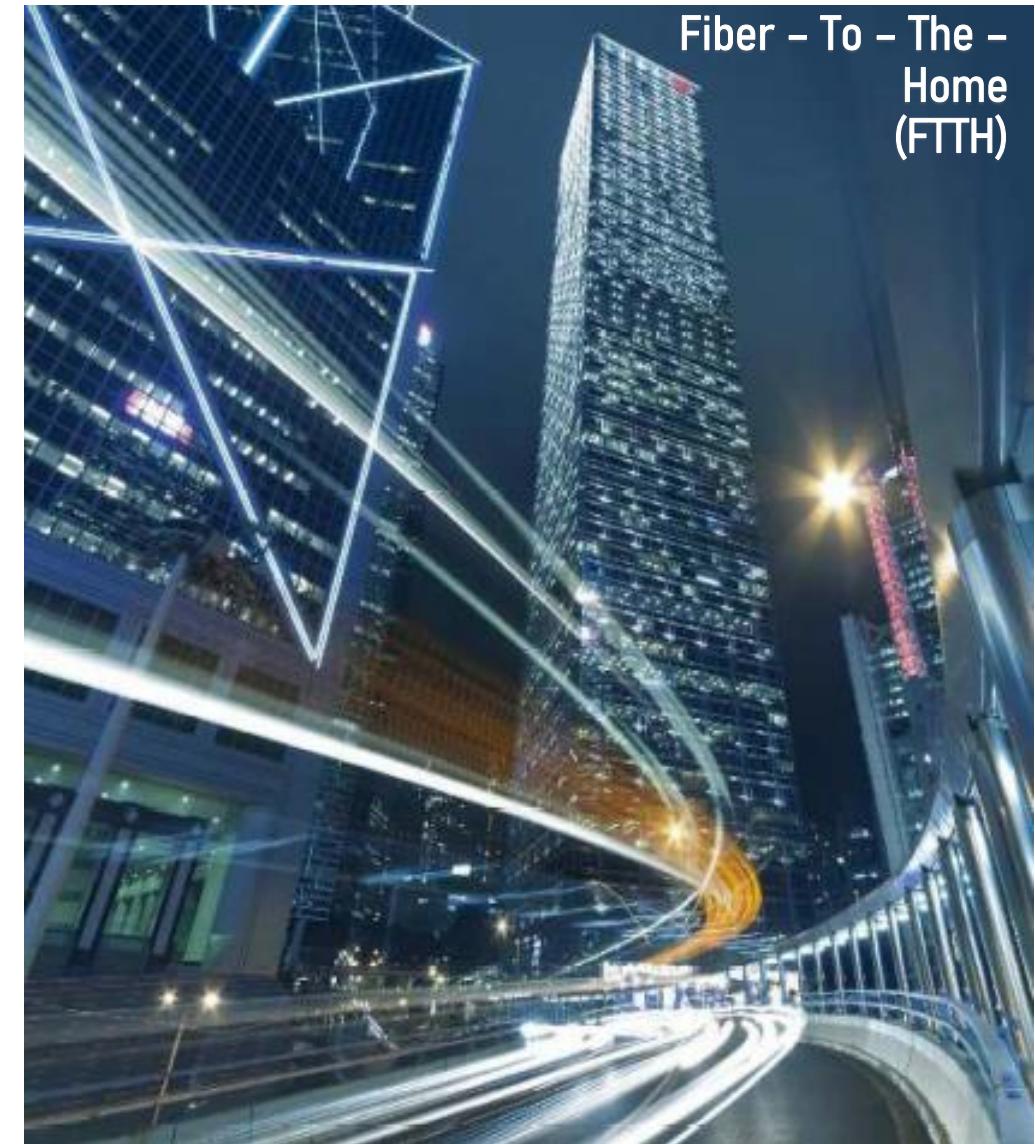
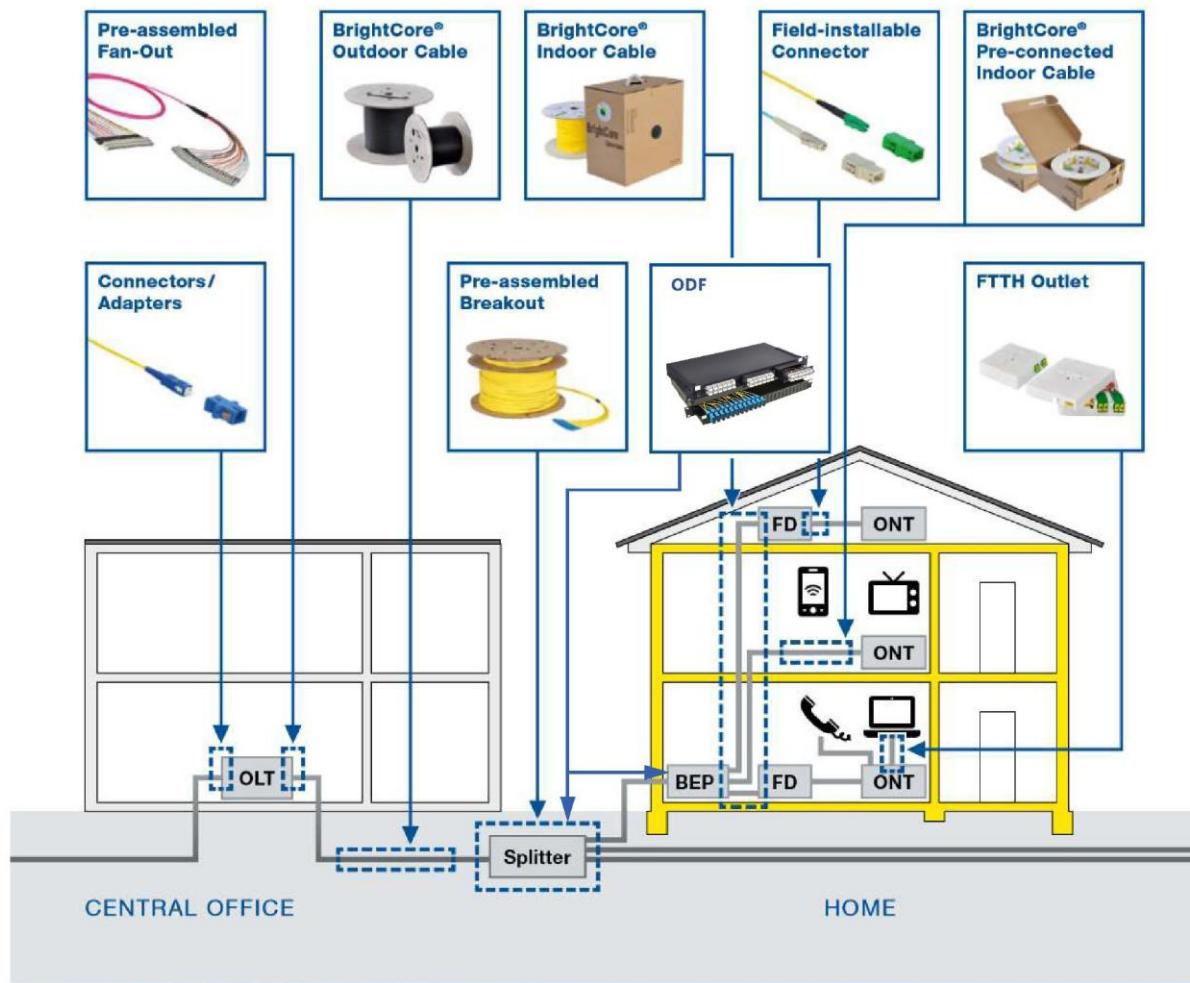
Heating Box

Microscope

Polishing Machine

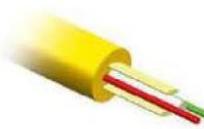
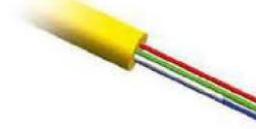
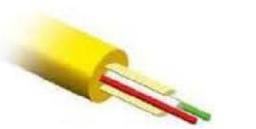
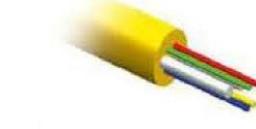


FTTH Over View



FTTH

BrightCore Installation Cables

<p>Indoor Cable EasyPull 2.0 x 2.4 mm 2 or 4 fibers: single-mode or multi-mode LSZH cable jacket One rigid element from FFP and aramid yarns 250 N and optimized for pulling Soft flexible and easy to strip Small size, low weight, and low friction rate</p> 	<p>Indoor Cable EasyPush 2.0 x 2.4 mm 4 fibers: single-mode or multi-mode LSZH cable jacket Two rigid elements from FRP 150 N and optimized for pushing Soft* flexible and any to strip Small size, low weight, and low friction rate</p> 	<p>Indoor Cable EasyBlow-in 2.0 mm (8 FO) 4 — 12 fibers: single-mode or multi-mode LSZH cable jacket Aramid yarns 250 N and optimized for blowing into micro ducts Soft, flexible and easy to strip Small size how weight, and low friction rate</p> 	<p>Outdoor Cable ADSS 5.6 mm 2 or 4 fibers: single-mode or multi-mode Cable jacket: HDPE with UV stabilization Four rigid elements from FRP, swelling cords and aramid yarns 1200 N Soft, flexible and easy to strip (2 rip cords) Suitable as aerial drop cable</p> 	<p>Universal Cable 2.0 x 2.4 mm 2 or 4 fibers: single-mode or multi-mode LSZH cable jacket with UV-Stabilization One rigid element from FRP, swelling cords and aramid yarns 250 N Soft, flexible and easy to strip For both indoor and outdoor installations</p> 
<p>Indoor Cable EasyPull 2.9 mm 2 or 4 fibers: single-mode or multi-mode LSZH cable jacket One rigid element from FRP and aramid yarns 400 N and optimized for pulling Soft, flexible and easy to strip Small size, low weight, and low friction rate</p> 	<p>Indoor Cable EasyPush 2.1 mm 2 or 4 fibers: single-mode or multi-mode LSZH cable jacket Two rigid elements from FRP 150 N and optimized for pushing Soft, flexible and easy to strip Small size, low weight, and low friction rate</p> 	<p>Indoor Cable EasyBlow-in 3.2 mm Up to 48 fibers: single-mode or multi-mode LSZH cable jacket One rigid element from FRP 300 N and optimized for blowing into micro ducts Soft, flexible and easy to strip Small size, how weight, and low friction rate</p> 	<p>Outdoor Cable ADSS 6.5 mm Up to 48 fibers: single-mode or multi-mode Cable jacket: HDPE with CIV stabilization Three rigid elements from FRP, swelling cords and aramid yarns 3000 N Easy to strip with 2 rip cords Suitable as aerial drop</p> 	<p>Universal Cable 2.4 x 2.9 mm 2 or 4 fibers: single-mode or multi-mode LSZH cable jacket with LIV-Stabilization One rigid element from FRP -swelling cords and aramid yarns 400 N Soft, flexible and easy to strip For both indoor and outdoor installations</p> 

FTTH

BrightCore Installation Cables

- Thermal performance -40 C and +80 C.
- High anti-buckling strength
- Compact design, from 3.5 kg per km
- Low friction rate
- Fast, easy and economical installations, both push and pull
- Easy to strip and the fibers are easily accessible
- Soft, flexible and can be bent in any direction.
- Compact and robust for outdoor / aerial installations under harsh environmental conditions.
- Environment / network safe in the course of lightning strikes.



FTTH A-CONNECTORS, ODF, OUTLET & PRE-ASSEMBLED CABLES

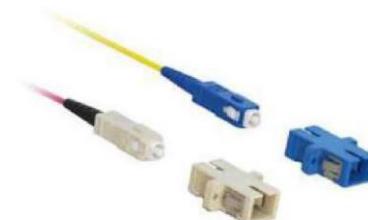
Field-installable LC

Connector Same dimension and appearance as standard LC connector Excellent optical performance: IL ≤ 0.25 dB, RL 45 dB (PC), RL 60 dB (APC) Easy and quick installation on site No special tools and knowledge required



Field-installable SC

Connector Same dimension and appearance as standard SC connector Excellent optical performance: IL ≤ 0.25 dB, RL 45 dB (PC), RL 60 dB (APC) Easy and quick installation on site No special tools and knowledge required



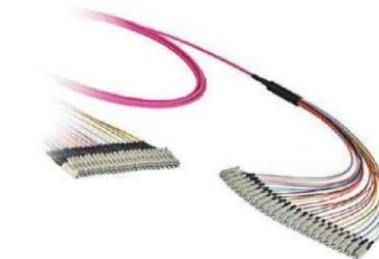
Surface Mount Outlet

Suitable for splicing, pre-assembled cables and field-installable connectors Up to two duplex adapters (LCT SC) Adapters with dust and laser protection Retainer for shrink and splice protection Fiber over-length management system



Pre-assembled Fan-Outs

Single-fiber connectors are pre-terminated on one or both sides Fiber type: single-mode or multi-mode Cable type: indoor, outdoor, and ODF Fiber count: up to 24 (indoor and ODF) or 4B (outdoor) Easy and fast installation (plug and play)

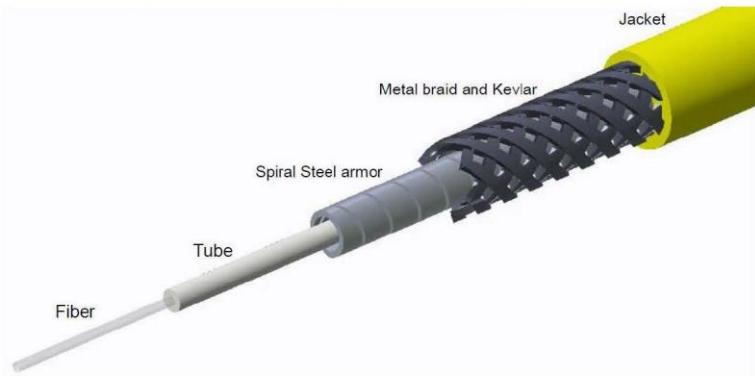


Optical Distribution Frame

The 19" IU optical distribution frame can be installed in any rack of 19" Number of connectors 12/24/48/96 Easy to install and disassemble Push-pull drawer, Splice and patch box



FTTH HIGH MECHANICAL REQUIREMENT CABLES

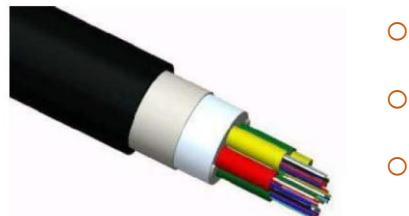


Steel armored indoor and outdoor cable

Spiral Steel armor protected

For high mechanical requirement

Halogen free and non-corrosive fire gases



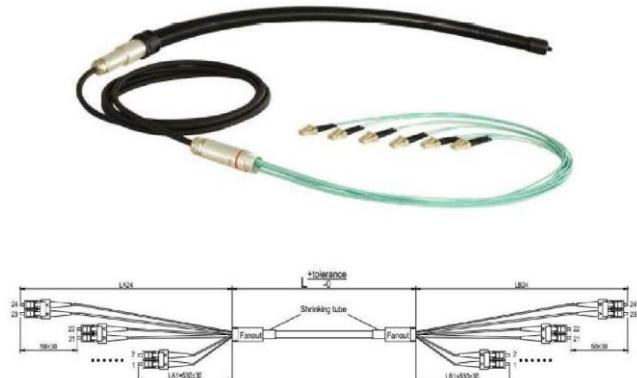
- High capacity in data transmission
- Metal free indoor and outdoor cable
- Rodent protection, glass-armored
- For high mechanical requirements
- Longitudinal and transversal watertight cable



This BarqTelecom innovated cable meets all applications of OF300-OF10000, and contains one strength member which is surrounded by four multi-fiber (up to 48fibers) loose tubes which are jelly-filled. The cable is strengthened by glass yarns and further protected by a LSZH outer jacket with UV stabilization. As a result, the cable can be served for indoor/outdoor installation.

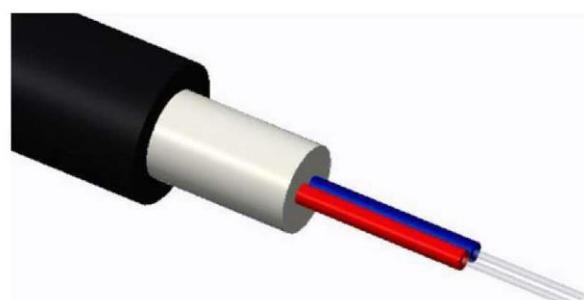
FTTH CPRI, FEEDER, JUMPER AND ODVA CONNECTORS

Fiber Optic trunk cable



- Easy assembly
 - High crush resistance and tensile
 - Dust protection acc. to IP67 Non-metallic,
 - Halogen-free, flame-retardant compound cable
 - Fiber type: single-mode OS2, multi-mode OMI - OM4
 - 100% factory tested

Glass-yarn distribution cable



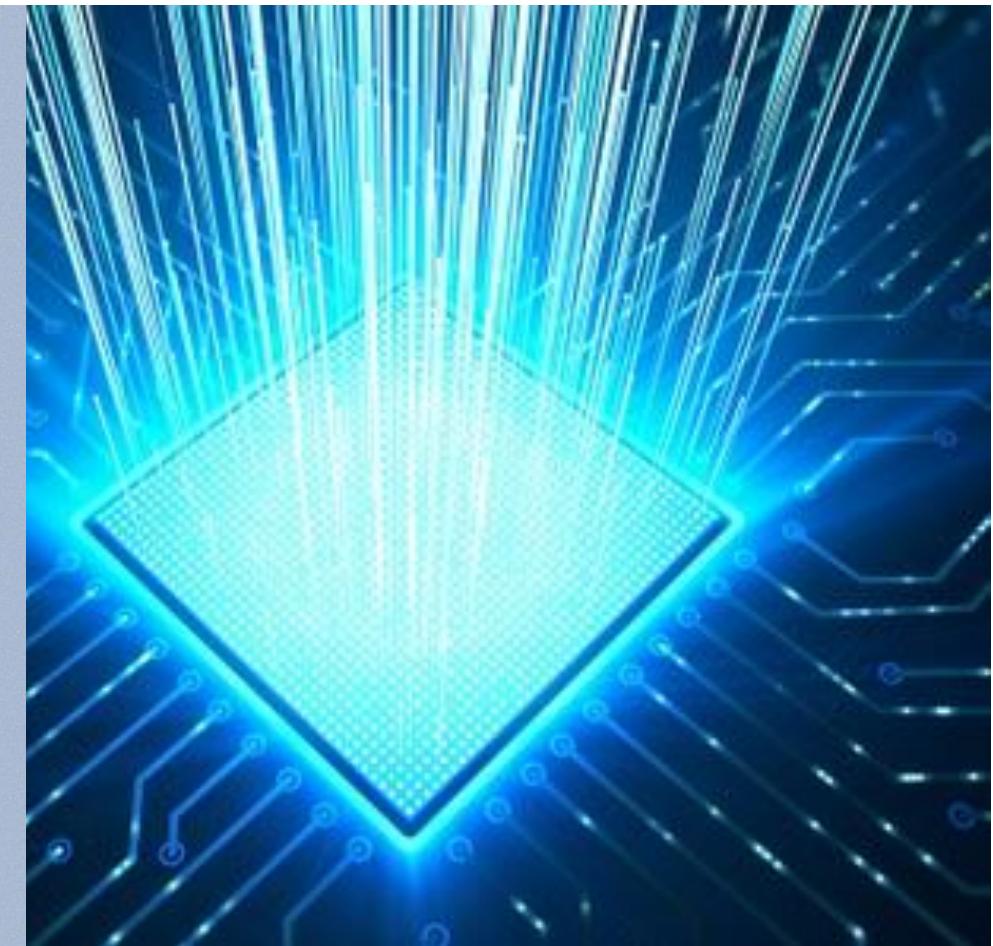
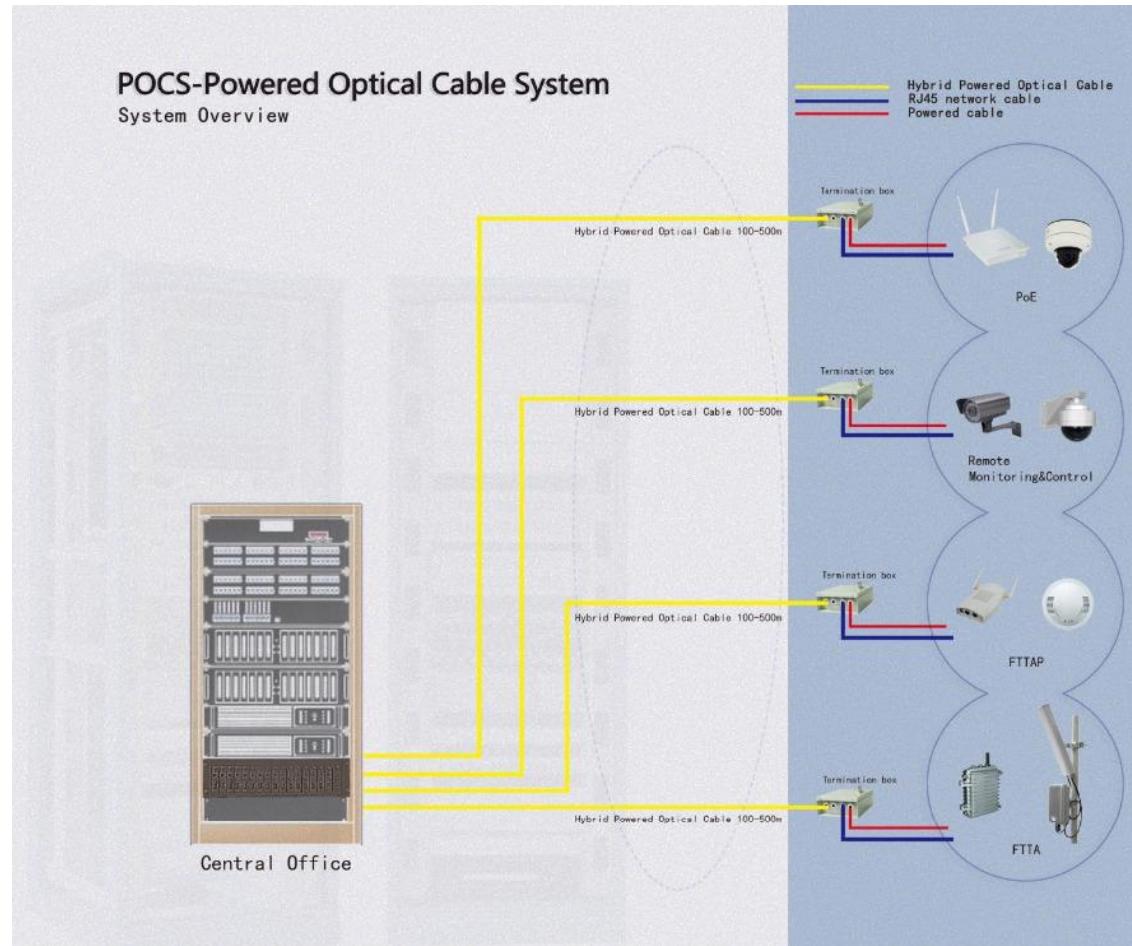
- Metal free indoor and outdoor cable
 - Glass-yarn
 - Halogen free and self-extinguishing
 - Low fire load for high safety requirements
 - 4.8 mm diameter 25 kg/km
 - Bend radius static [mm]: 48
 - Bend radius dynamic [mm]: 72

ODVA connector



- Bayonet locking - connectors are well protected, and will not drop off during wire routing
 - Less spare parts, easy assembly, easy to use
 - Flexible application, can be customized according to different applications
 - Insertion loss is less than 0.5dB, tensile strength ranges from 100~300N according to different structures
 - Excellent sealing - excellent water-proof level and dust-proof level (IP67)

POCS OVERVIEW



FTTH COU, RTU, INJECTOR, CONNECTOR AND CABLES

Central Office Unit

A Novobit-developed integrated IU with power and fiber distribution elements which consists of two fiber optical transceivers and two independent power suppliers. It is capable of powering a device at distances of 100-500m without the location limit. Output power DC48V IA



Remote Termination Unit

A Novobit-developed powered optical device that features PU material, small size, high reliability, multifunction and customized output voltage. It is capable of powering a device at distances of 100-500m without the location limit. Output voltage 48V, 24V, 12V, 9V, 5V and other output voltage on demand



Injector Box

Optically extended power over Ethernet injector for long range applications up to 1Gbit of bandwidth over 600m. Simple plug and play system with Novobit AG hybrid cable and connector. Up to 30W (IEEE 802.3at) and intelligent IEEE 802.3af/802.3at Poe power management



Hybrid Connector

Hybrid optical and electrical connector for Novobit OE-PoE application. Holds 2 x optical fibers and 3x copper conductors. Plug and play with NovobitAG OE-PoE injector box

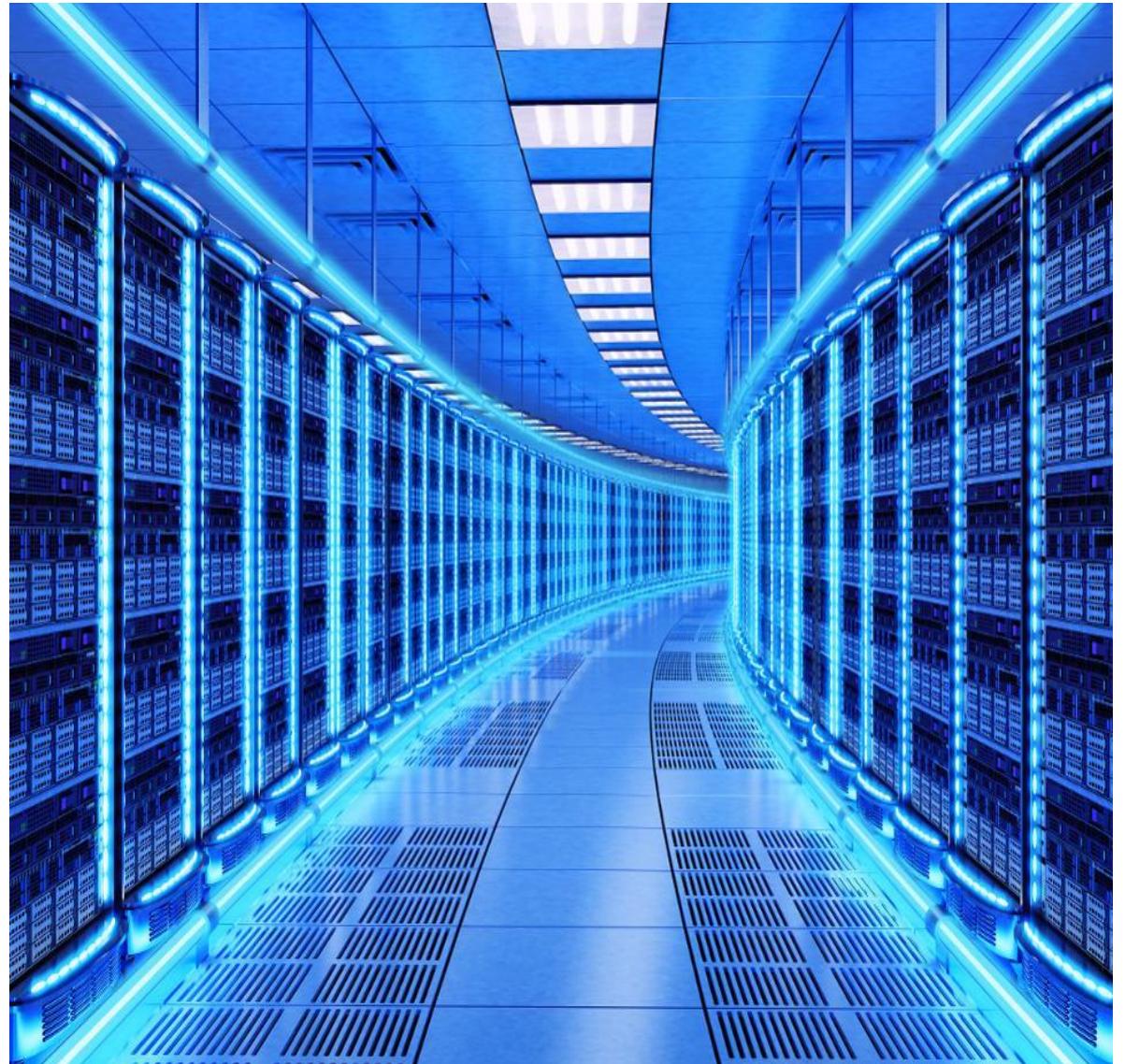
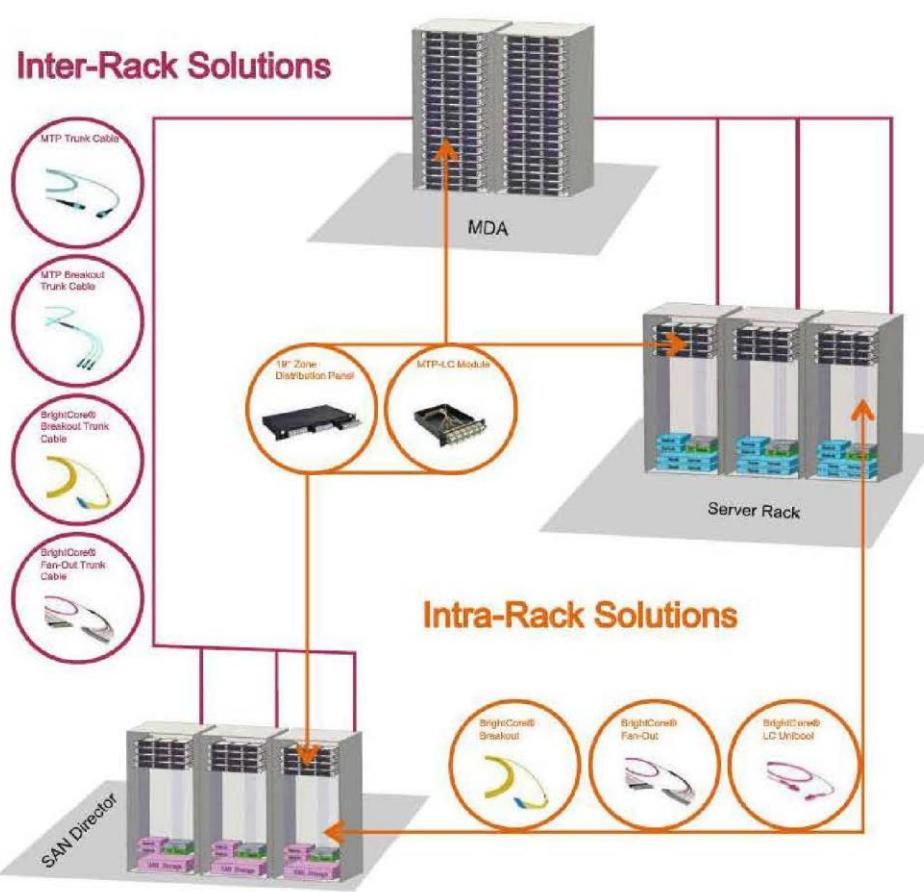


Hybrid Cables

Aramid yarn armored type and Copper braid shield armored type. 1-8 fibers and 2 or 3 copper conductors. Copper cross section and specific cable structure on customer demand



DATA Center Over View



DATA CENTER INTRA-RACK SOLUTIONS

19" Zone Distribution Panel
Mounted in or close to equipment racks Plug and play system, easy to deploy Contains up to 4 MTP-LC modules: 1 92 LC connections (4x48) 144 LC connections (3x48) 96 LC connections (4x24) 72 LC connections (3x24)



MTP -LC Module
To be mounted in 19" zone distribution panels Breakout into 48 LC connections Optionally with 24 or 12 LC Connections Available in SM or MM OM3 /OM4



BrightCore Breakout
High-density cable design Can be breakout into 4-24 pre-connected individual cables of 1.4 or 2.0 mm diameter Each individual cable contains 1—4 fibers LSZH cable jacket



BrightCore Fan-Out
High-density cable design 24 SM or MM fibers Pre-assembled individual fan-out cable diameter: 0.9 or 1.7 mm I-SZH cable jacket



BrightCore LC Uniboot
Pre-assembled LC Uniboot cable Easy patching with push-pull mechanism even in ultra dense environment High-density cable design Cable diameter (uni-construction): 1.4 mm LSZH cable jacket



DATA CENTER INTRA-RACK SOLUTIONS

MTP Trunk Cable

Pre-assembled with MTP connectors containing 12 or 24 fibers Available in SM or MM OM3 /OM4 Cable length can be customized I-SZH cable jacket



MTP Breakout Trunk Cable

192, 144, 96, 72 fiber strand counts MTP connectors pre-assembled Individual cable diameter: 2.0 mm Cable length can be customized I-SZH cable jacket



BrightCore Breakout Trunk Cable

High-density cable design Can be breakout into 4—24 pre-connected individual cables of 1.4 or 2.0 mm diameter Each individual cable contains 1—4 fibers LSZH cable jacket



BrightCore Fan-Out Trunk Cable

High-density cable design 24 SM or MM fibers Pre-assembled individual fan-out cable diameter: 0.9 or 1.7 mm LSZH cable jacket



DATA CENTER BUILDING ELEMENTS

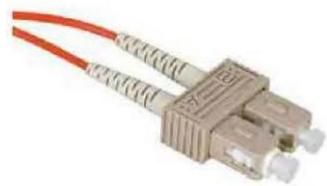
LC Duplex Push-Pull Patch Cord

Pre-assembled with LC duplex connectors Easy patching with push-pull mechanism Available in SM or MM OM3 /OM4 Cable length can be customized LSZH cable jacket



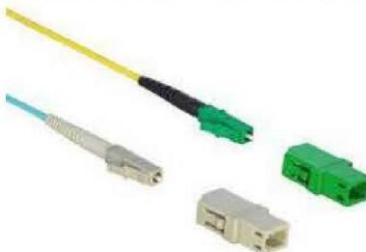
Standard Patch Cord

Pre-assembled with CC, SC, E-2000 or ST connectors Available in SM or MM OMS /OM4 Cable length can be customized LSZH cable jacket



Field-installable LC Connector

Same dimension and appearance as standard LC connector Excellent optical performance: ILS 0 25 dB, 45 dB (PC), RL 60 dB (APC) Easy and quick installation on site No special tools and knowledge required



Cable Management Accessory

Front and rear cable manager Easily mountable on zone distribution panels Standard 1 U Robust steel construction



MTP Adapter

One piece adapter design Available in SM and MM Compatible with MTP Elite and Standard connectors Non-debris generating dust plugsComply with IEC standard 61754-7



UNBOOT CONNECTOR

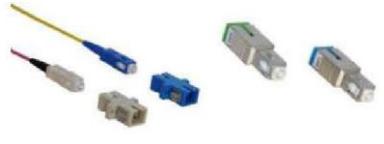


The new Uniboot connector is intermate able with all standard LC Duplex adaptors. It possesses clear marking to easily differentiate polarity A-A and A-B.

Assembled with our Data Center BrightCore cable we are able to offer ultra-thin LC Uniboot duplex patch cords (uni-construction) with only 1.4mm cable diameter.

The reduction in cable diameter allows an improved air circulation and accessibility. This is ideal for data center applications. The LC Uniboot connector is available in single-mode (PC and APC) and multi-mode.

PASSIVE COMPONENTS CONNECTORS/ADAPTERS, ATTENUATORS

LC	E-2000	FC	DIN	MTRJ
				
SC	ST	MU	MTP / MPO	Hybrid Adapters (LC/SC/FC - SC/ST/FC)
				

PASSIVE COMPONENTS

CABLES

Semi-tight & Tight Tubes



Simplex cable



Duplex Cable fig 8



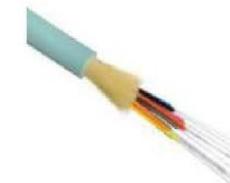
Duplex Cable fig 0



Breakout Cable



Riser Cable



Fan-out cable



PRODUCTION EQUIPMENT

Heating Box

Temperature range: 0 c to 150 c Over-temperature alarm Timer (range): 5 to 240 minutes Horizontal curing for 24 connectors: All standard connectors Vertical curing for 24 connectors: All standard connectors Vertical curing for 48 connectors: All standard connectors Horizontal and vertical curing for 48 connectors: Only LCS CE Certification



Microscope

FO video microscopes with or without X- and Y-axis adjustment Magnification: 200x or 400x Applicable to connectors (PC or APC) with a ferrule diameter of 1.25 mm or 2.5 mm



Polishing Machine

Used to polish and clean the end faces of connectors Adjustable pressure levels: 0— 80 N Suitable for all standard connector types: LC, SC, FC, SC, ST, MTP / MPO, MTRJ, MU etc. Polishes up to 24 connectors (PC and APC) Adjustable timer Weight: 3D kg



PREMIUM & HIGH QUALITY PRODUCTS

Quality class	Ferrule surface	Interference				Measurement		IEC 61753-1	
		Radius mm	Offset um	Fiber height nm	Angle	IL	RL	IL	RL
High quality/ Grade C	PC	5-25	≤ 50	-50 ~ +100		≤ 0.35	≥ 45	$\leq 0.25\text{dB}$ mean $\leq 0.50\text{dB}$ max. for $>97\%$ of sample	≥ 45
	APC	5-12	≤ 50	100 ~ +100	7.6-8.4	≤ 0.35	≥ 65		$\geq 60\text{dB}$ (mated) and $\geq 55\text{dB}$ (unmated)
Premium quality/ Grade B	PC	7-25	≤ 50	-50 ~ +50		≤ 0.25	≥ 50	$\leq 0.12\text{dB}$ mean $\leq 0.25\text{dB}$ max. for $>97\%$ of sample	≥ 45
	APC	5-12	≤ 50	-50 ~ +50	7.7-8.3	≤ 0.25	≥ 65		$\geq 60\text{dB}$ (mated) and $\geq 55\text{dB}$ (unmated)

SOME OF OUR CUSTOMERS



Telegärtner



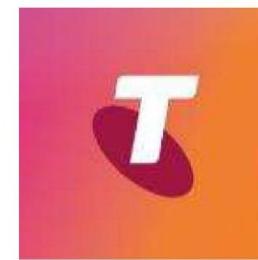
Convincing cabling solutions



HUBER+SUHNER
Excellence in Connectivity Solutions



ERICSSON



LAPP KABEL



Website: www.ittelecom.ir

Email: Parham@ittelecom.co

About us



Ittelecom broadband is your partner for fiber optics since 2018. Our producer portfolio includes FTTH cables / FTTH drop cables, field-installable connectors, pre-assembled cables, FO outlets, and other FTTX / FTTH products.

The products are highly appreciated by customers from many countries such as Switzerland, Germany, Austria, France, Spain, UK, United States and Japan.

Ittelecom is an ISO 9001 and 14001 certified company. All our products are carefully produced with high precision and undergo a rigorous review and testing process.