

enlighten

HIGH-QUALITY OPTICAL PASSIVES

TELESTE

OPTICAL PASSIVES

Product Portfolio

Brochure Rev. 2.0/11.2022



LET US **enlighten** YOUR FIBRE NETWORKS

WELCOME INTRODUCING TELESTE

Teleste offers an integrated product and service portfolio that makes it possible to build and run a better networked society. Our optical passives solutions bring television and broadband services to your home, secure your safety in public places and guide your use of public transport.

Steady and persistent

With solid industry experience and drive for innovations, we are a leading international company in optical broadband actives and passives, security and information technologies and related services. We connect with our customers through a global network of offices and partners.

The enlighten portfolio

Is a carefully selected, ever-increasing, high-quality portfolio of Optical Passives components. It comprises of a hand-picked range of a vast range of optical products that we traditionally supply to customers.

In this brochure we present our Wall Outlets designed for indoor use, Wall Boxes for combined indoor/outdoor use and available with splice trays and fitted with optical splitters if required, a series of Optical Distribution Frames with either sliding or hinged drawers as well as our Optical Connectivity products. All the Teleste Boxes, Outlets and ODF products can be supplied with adapters and pigtails as required. These are installed and tested in the factory to ensure quality and minimise installation time of products. All components are tested to industry standards and undergo quality assurance checks.

Certain products are offered in different Product Grades, we invite you to benefit from this and increase your business efficiency by choosing the right product for the right place. This will undoubtedly optimise your investments and make your various fibre applications more successful and profitable. We utilize at every operational stage, a lean way of working, which contributes to our ability of being able to supply high-quality European products at global competitive price levels, combined with world-class customisation capabilities.

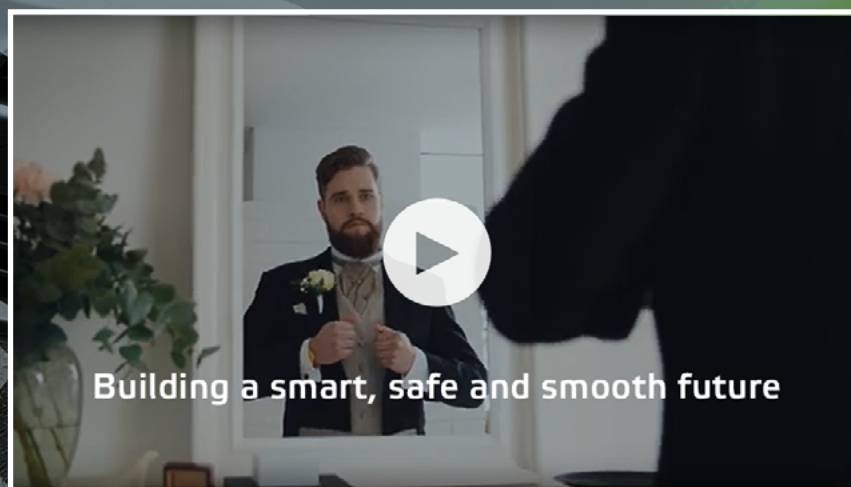


Learn more about the Enlighten Portfolio by scanning the above QR-code with your smartphone.

We can support you wherever you are

Teleste maintains a considerable stock of Optical Passives in our main distribution centre in Belgium. Thereby we are able to serve with overnight, just-in-time deliveries to all corners of Europe. Furthermore we constantly try to improve our Logistic Eco-Efficiency methods, such as e.g. 'carpooling' to achieve optimal transportation capacity, which reduces both CO₂ emissions and cost.

We have been around for more than 65 years and will continue to bring about a SMART, SAFE and SMOOTH future.



Building a smart, safe and smooth future

What would your day be like without Teleste?
And what is it like with Teleste? Take a look!

LET US **enlighten** YOUR FIBRE NETWORKS

// Teleste designs
the best solutions
based on quality
and innovation

WALL OUTLETS AND POINT OF ENTRY BOXES FOR EVERY FTTH PROJECT

We offer a complete series of smart designed Fibre Outlets targeted for indoor installation. Commonly the Outlets are provided as IP20 protection rated, and our development focus is as always to guarantee smooth-running deployment, whatever FTTH project size and type.

Wall Outlets

Modern compact Wall Outlets designed for ease of install in the home. The Outlets accommodate the termination of installation cables to pigtails and provides an interface between the network and the customer device. These outlets provide superior performance in compact and stylish housings.

Highlights

- Swift and easy wall-mount
- Compact two-parts design (body and cover)
- Hosts SC Simplex and LC Duplex Adapters
- Suitable in both (MDU) and (SFU) units
- Available as outlets only or with adapters & pigtails fitted as needed
- Several models available with splice trays



Point of Entry Boxes


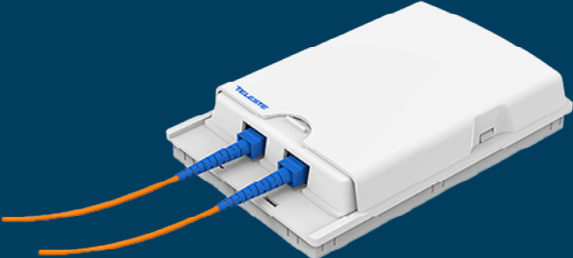

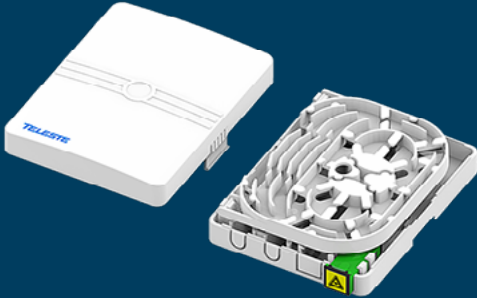
Teleste's range of Point of Entry boxes are designed to allow the easy connection of customer drop fibres and their entry to customer properties. Versions are available for internal distribution cabling and also for external cabling applications. The internal versions have clip on lids and the external versions have hinged lids giving IP65 protection.



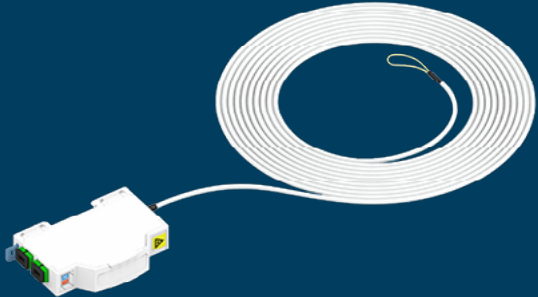

Highlights

- Suitable for Indoors & Outdoors mounting applications
- External versions IP65 rated
- Supports both SC Simplex and LC Duplex adaptors
- Delivered empty or with adaptor and/or with pigtail(s) in a suitable box
- Available in white or black versions







AVAILABLE
MODELS

Model: TEN-FSP	
	<div>TEN-FSP FTTH Protection Box Series - with splice or adapter fittings</div> <div>On-line Information</div>
Model: TEN-FW01	
	<div>TEN-FW01, 2F SC/LC FTTH Wall Outlet</div> <div>On-line Information</div>
Model: TEN-FW02	
	<div>TEN-FW02, 2F SC/LC FTTH Wall Outlet</div> <div>On-line Information</div>
Model: TEN-FW03	
	<div>TEN-FW03, 2F SC/LC FTTH Wall Outlet</div> <div>On-line Information</div>

Model: TEN-FW04	
	<div>TEN-FW04, 4F SC/LC FTTH Wall Outlet</div> <div>On-line Information</div>
Model: TEN-FW05	
	<div>TEN-FW05, 4F SC/LC FTTH Wall Outlet</div> <div>On-line Information</div>
Model: TEN-FW06	
	<div>TEN-FW06, 2F SC/LC FTTH Wall Outlet</div> <div>On-line Information</div>
Model: TEN-FW07	
	<div>TEN-FW07, 4F SC/LC FTTH Wall Outlet</div> <div>On-line Information</div>

AVAILABLE
MODELS

Model: TEN-FW08 - Point of Entry Box	
	<div>TEN-FW08 FTTH Wall Outlet - protection box</div> <div>On-line Information</div>
Model: TEN-FW08E - Point of Entry Box	
	<div>TEN-FW08E - Outdoor FTTH Wall Outlet - protection box</div> <div>On-line Information</div>
Model: TEN-FW012 - Point of Entry Box	
	<div>TEN-FW012, 2F SC/LC FTTH Wall Outlet</div> <div>On-line Information</div>
Model: TEN-FW012E - Point of Entry Box	
	<div>TEN-FW012E, 2F SC/LC - Outdoor FTTH Wall Outlet</div> <div>On-line Information</div>

Model: TEN-FW09	
	<div>TEN-FW09 - 2 x SC/APC FTTH Wall Outlet</div> <div>On-line Information</div>
Model: TEN-FW010	
	<div>TEN-FW010, 1F FTTH Wall Outlet</div> <div>On-line Information</div>

// We also offer designs particularly suitable for installation in service and riser cupboards of buildings



On-line information can be found here and here

LET US **enlighten** YOUR FIBRE NETWORKS

WALL AND AERIAL BOXES BOXES SUITABLE FOR ALL NEEDS

The enlighten Wall and Aerial Box Series has boxes to suit every size of project - offering a versatile set of units fitted with lockable covers, gradual cable glands located at the bottom and designated for outdoor harsh conditions.

// Our products are easy to install and maintain, saving time and costs



Wall Box Series

Designed for external mounting these cable connection boxes are rugged, versatile and flexible, providing an easy connection between feeder cables and subscriber cables. They come equipped with a splice tray and a lock for secure fixing of box lid. These boxes are ideal for outdoor applications.



Highlights

- Multifunctional trays that can accommodate mini-splitters
- Hosts SC Simplex and LC Duplex Adapters
- Lockable lid to avoid unauthorized access
- High quality plastics
- Easy to install



Aerial Box Series

Designed with easy customer drop installs in mind, our aerial boxes are flexible and available with pre-installed cables and adapters, ready for harsh outdoor conditions as they come specified for use in a temperature range of -40 - +80 °C and are built in high quality materials that guarantees long term performance.

Highlights

- Designated space to accommodate a mini-splitter
- Hosts SC Simplex and LC Duplex Adapters
- Lockable lid to avoid unauthorized access
- IP65 Protection Class
- Designed for easy installation on a pole



Model: TEN-FWB1	
	TEN-FWB1, 2F Outdoor Distribution Box On-line Information
Model: TEN-FWB2	
	TEN-FWB2, 4F Outdoor Distribution Box On-line Information
Model: TEN-FWB3	
	TEN-FWB3, 8F Outdoor Distribution Box On-line Information
Model: TEN-FWB5	
	TEN-FWB5, 24F Outdoor Distribution Box On-line Information

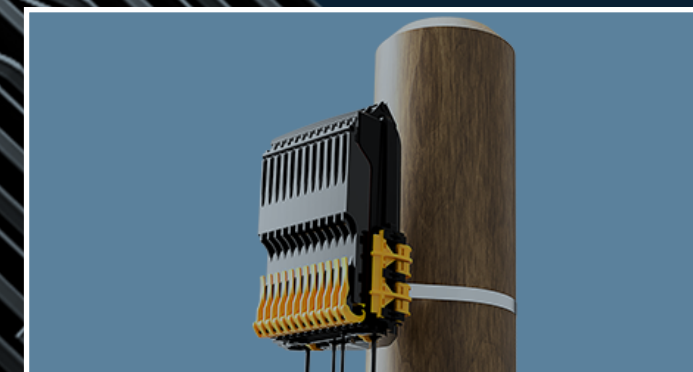
Model: TEN-FWB7	
	TEN-FWB7, 12F Outdoor/Indoor FTTH Interface Box On-line Information
Model: TEN-FWB9	
	TEN-FWB9, 48F - Outdoor Distribution Box On-line Information
Models: TEN-FAB1	
	TEN-FAB1, 24F Outdoor, Aerial On-line Information
Models: TEN-FAB2	
	TEN-FAB2, 24F Outdoor, Aerial On-line Information

LET US **enlighten** YOUR FIBRE NETWORKS

// Individual chambers provide unique IP68 sealing for each customer drop

MULTIPURPOSE ENCLOSURES DESIGNED FOR BOTH UNDERGROUND AND OVERHEAD APPLICATIONS

We offer a range of IP68 rated Network Branch and Drop Enclosures exclusively designed with individual chambers on one side and splicing/splitting on the other.



TEN-FME1-B

Teleste has developed a range of unique Branch Enclosures consisting of two stacks of splice and splitter trays mounted into a rugged top hinged enclosure which is sealed with strong catch mechanisms. Cable entry is at the base of the enclosure and sealed using a unique sealing mechanism.

Highlights

- Top hinged mechanism
- 4 x Main Cables
- 12 x Branch Cables
- 192 splices max.
- IP68 Enclosure Classification

[View the introduction video on-line](#)

[On-line information and configuration data](#)

TEN-FME2-Dx

Teleste's unique drop enclosure is designed to be installed in both Underground and Overhead applications. Each unique IP68 customer connection chamber can house up to 4 individual fibre customer drop connections. This ensures that each customer connection chamber is isolated from the others should water enter the chamber through incorrect installation of the customer drop cables.

Highlights

- Uses existing drop cables and connectors – no special versions needed
- IP68 protection to each individual customer chamber – protects other customers on the enclosure
- Unique and robust catch mechanisms and tool-less ease of use



[On-line information and configuration data](#)

OPTICAL CONNECTIVITY LET'S CONNECT

Reliable optical connectivity is fundamental in a world of instant, global communication. Performance cannot be allowed to decline over time - long-term, stable performance is essential. Our screened quality rated components have proven that for a long time in the harsh conditions of the Nordics.



Patchcords and Pigtails

High-quality at the most competitive overall cost is of utmost importance to us, for that reason we maintain firm test and screening procedures to help us eliminate unsatisfactory items likely to exhibit early failures. Furthermore we provide our clients optimum business efficiency whereby offering our patchcords and pigtails in two different Grades; STANDARD and PREMIUM. The PREMIUM GRADE features high optical characteristics and prime selection of components that offers excellent performance for the most demanding applications. We provide these items in various connector configurations and in various fibre types, ranging from G.652.D to G.657.B3, please refer to the 'Configuration Options' on the next page.

On-line information

Adapters

Our line of Adapters consist of factory- and field-installable items, supporting a variety of connector types, end-face configurations and structures, e.g. SC simplex/duplex and LC simplex/duplex as well as Quad. They can be ordered having Black or Transparent Dust Caps - the last one makes it easier to locate the red light emitted by a Visual Fault Locator (VFL) without having to remove all the protection dust caps in a panel - we also offer Adapters having hinged shutters.

On-line information

Splitters

We supply our customers with field proven Splitters - both Fused Biconical Taper (FBT) and Planar Light-wave Circuit (PLC) - our range accomplish both cost effectiveness and high reliability for customers seeking to maximise the functionality of their optical network circuits. Both variants can be installed in headends or in distribution points (indoor/ outdoor), although the PLC line carries outstanding environmental and mechanical reliability having very low polarization dependent loss and excellent channel-to-channel uniformity. Both lines can be ordered with a range of housings styles, including; ABS Box, ABS Mini, Stainless Tube and Steel Box Nano - the latter being the most compact option.

On-line information

Attenuators

Our broad line of high-precision fixed in-line attenuators are available in rugged and compact housings comprising some key competitive advantages; the line exhibits low return loss, is wavelength insensitive whilst maintaining attenuation accuracy, ensures repeatable performance and is offered in doped fibre operating principle.

On-line information

CONFIGURATION CHART
OPTICAL CONNECTIVITY

Options for Patchcords and Pigtails

1

2

3

1 2 3 4 5

1 2 3 4

1

TEN - 0 1 2 6 S - L 9 T Y - 1

Configuration Example

TEN-01225-L2TY-2

Pigtail, Standard SC/APC, G652D, Simplex, LSZH, 2.0mm, Tight buffer, Yellow, 1m

1-1 Connector #1		1-2 Connector #2		1-3 Glass Grade		1-4 Fibre Type		1-5 Count	
0	Pigtail			1	Premium	1	Corning SMF-28 Ultra (D/A1)	S	Simplex
1	SC/APC	1	SC/APC	2	Standard	2	Corning ClearCurve LBL (A2/B2)	D	Duplex
2	SC/UPC	2	SC/UPC	3	Custom	3	Corning ClearCurve ZBL (G.657.B3)		
3	LC/APC	3	LC/APC			4	Teleste standard G.657A1		
4	LC/UPC	4	LC/UPC			5	Teleste standard G.657A2		
						6	Teleste standard G.652D		
2-1 Jacket Type		2-2 Diameter		2-3 Cable Structure		2-4 Colour		3-1 Length (m)	
P	PVC	9	0.9 mm	T	Tight buffer (0.9mm only)	Y	Yellow	1	20
L	LSZH	2	2.0 mm	L	Loose tube (0.9mm only)	B	Blue	2	25
		3	3.0 mm	2	Semi tight buffer	W	White	3	30
				S	Standard	R	Red	5	35
						G	Green	10	40
						8	Black	15	45

On-line information

Options for Splitters

1

2

3

1 2 3 4 5

1 2 3 4

1

TEN - S 0 2 2 5 - S 9 W Y - 1

Configuration Example

TEN-S0225-S9WY-1

Splitter PLC 1x2 SC/APC input, SC/APC output, G657A2, steel tube, 0.9mm, input white, output yellow, 1m

1-1 Splitter		1-2/3 No. of Ports		1-4 Connector Type		1-5 Fibre Type		2-1 Housing	
S	PLC	02	1x2	0	Bare input, Bare output	4	G.657A1	A	ABS
F	FBT	04	1x4	1	Bare input, SC/APC output	5	G.657A2	M	Mini ABS
		08	1x8	2	SC/APC input, SC/APC output	6	G.652D	S	Steel tube
		16	1x16	3	Bare input, LC/APC output	X	Not appli-cable	P	19" panel
		32	1x32	4	LC/APC input, LC/APC output			L	LGX module
		64	1x64	X	Not applicable				
2-2 Diameter		2-3 Colour In		2-4 Colour Out		3-1 Length			
B	Bare Fibre	Y	Yellow	Y	Yellow	1		m	
9	0.9 mm	B	Blue	B	Blue	1.5		m	
2	2.0 mm	W	White	W	White	2		m	
3	3.0 mm	G	Green	G	Green	X		Not applicable	
X	Not appli-cable	M	Multicolour	M	Multicolour				
		X	Not applic.	X	Not applicable				

On-line information

Options for Adapters

1

1 2 3 4 5 6

TEN - A 1 2 S G T

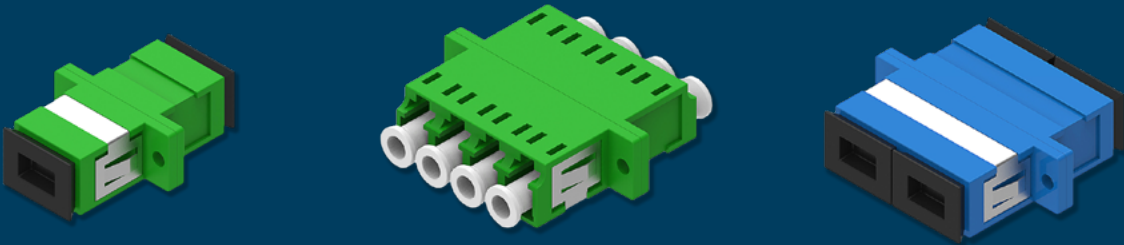
Configuration Example

TEN-A12SGT

Adapter, SC/APC, Standard Grade, Simplex, Green Colour with a Transparent Dust Cap.

1-1 Product		1-2 Connector		1-3 Grade		1-4 Fibre Count		1-5 Colour		1-6 Protection	
A	Adapter	1	SC/APC	2	Standard	S	Simplex	B	Blue	T	Transparent
		2	SC/UPC			D	Duplex	G	Green	S	Standard (Black)
		3	LC/APC			Q	Quad			H	Hinged Shutter
		4	LC/UPC								

On-line information



Options for Attenuators

1

1 2 3 4 5 6 7

TEN - R 1 2 P G 0 1

Configuration Example




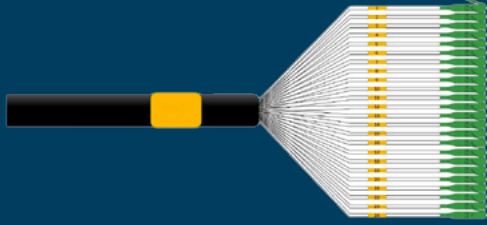
TEN-R12PG01

Attenuator, SC/APC connector, Standard Grade with Plastic Housing material in Green colour, having an Attenuation Value of 1 dB.

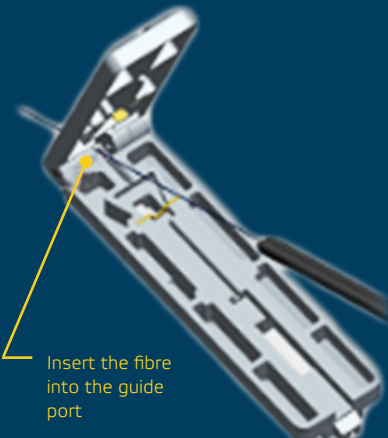
1-1 Product		1-2 Connector		1-3 Grade		1-4 Housing Material		1-5 Colour		1-6/7 Atten. Value (db)	
R	Attenuator	1	SC/APC	2	Standard	P	Plastic	B	Blue	01	1
		2	SC/UPC			M	Metal	G	Green	02	2
		3	LC/APC					M	Metal	03	3
		4	LC/UPC							05	5
										10	10
										15	15
										20	20
										25	25
										30	30

On-line information

CONFIGURATION CHART
OPTICAL CONNECTIVITY

Model: Fibre FICS Connector	
	FICS Connector Series - SC/APC SC/UPC Field Installable On-line Information
Model: FTTH Subscriber Cable	
	FTTH Subscriber Cable - White Singlemode - G.657A2/B2 On-line Information
Model: Distribution Cable	
	FTTH Subscriber Distribution Cable Singlemode (SM) - 2-4 Fibres On-line Information
Model: Pre-terminated Cables	
	TEN-PTB-34xxx Pre-terminated Microcables for Blown Ap- plications, 12 & 24 F On-line Information

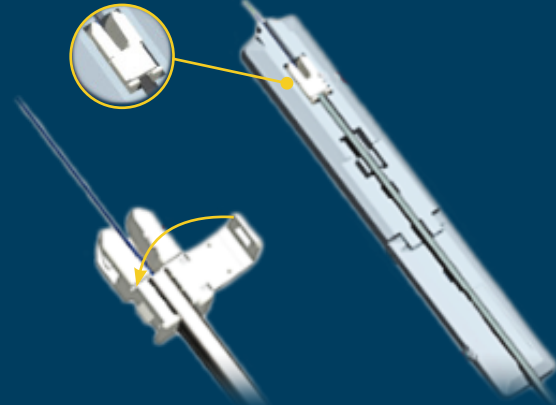
// The FICS Connector features a quick 4 step assembly design that is carried out in less than a minute



Insert the fibre into the guide port

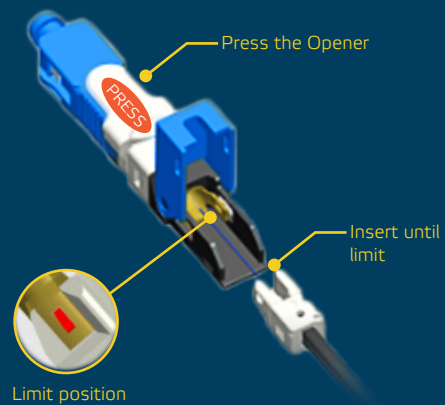
- Strip the cable using a standard Cable Stripper
- Inspect and clean the fibre
- Place and align the cable into the Cutting Jig

FIBRE PREPARATION



- Fix the cable in the FICS Connector Cable Holder
- Place the Cutting Jig in a standard Fibre Cleaver
- Cut the bare fibre

FIX THE FIBRE CABLE



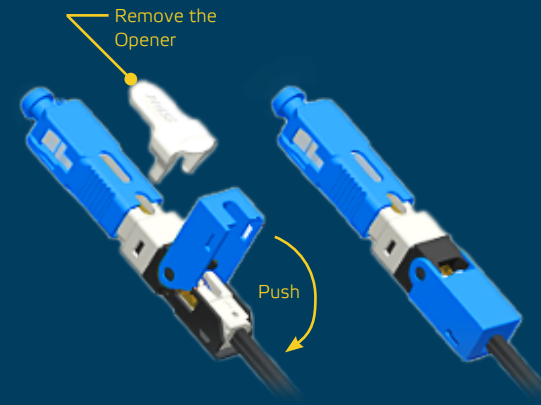
Press the Opener

Insert until limit

Limit position

- Press open the FICS Connector Opener
- Insert the fibre into the FICS Connector tail until the limit

INSERT THE FIBRE



Remove the Opener

Push

- Push down the FICS Connector cover
- Remove the FICS Connector opener
- Complete the assembly

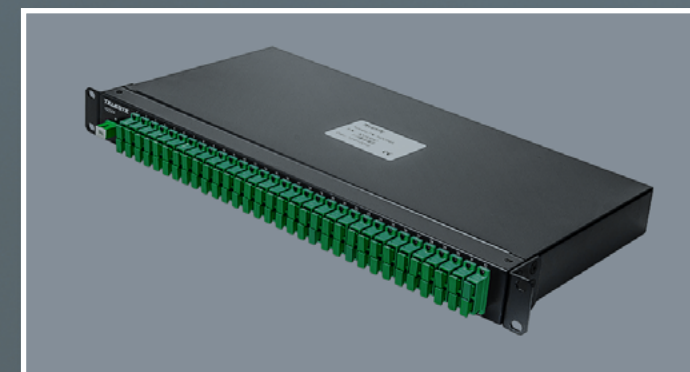
ASSEMBLE THE CONNECTOR

* Additional information in the product data sheet

// Our optical passives components always fulfil or exceed all applicable standards

OPTICAL DISTRIBUTION MAINTENANCE FRIENDLY DESIGNS

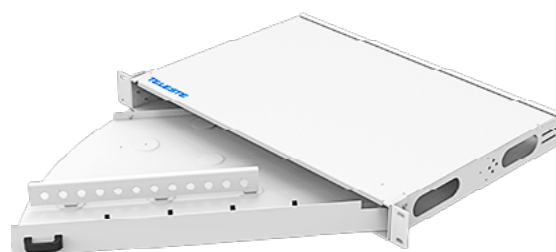
Teleste has long experience in designing optical headends to our customers. Our range of headend optical passives include fibre distribution frames, wavelength and optical power management. We have many models and rack formats available including necessary accessories to cover all needs without consuming too much space.



Standard Distribution Frames

Compact high quality distribution frames available as sliding or pivoting drawer versions. Offering ease of installation and efficient designs for interconnect and cross-connect applications as needed.

- Pivoting and sliding options to support 12-96F
- Optimal access to splices for repair and maintenance



High Density Solutions

Modular solutions designed specifically for headends and data centres where capacity is an issue and material and component quality are paramount.

- Fibre capacity 12-288F
- High density solution with 12 module ports
- Cable management drawer incorporated



Optical Wavelength Management

Designed to be versatile, cost effective and easy to install solution for headends. Available for WDM, CWDM and DWDM supporting ITU channel spacing.

- Excellent isolation
- Low insertion loss over the whole temperature range
- Additional 1310 nm extension port



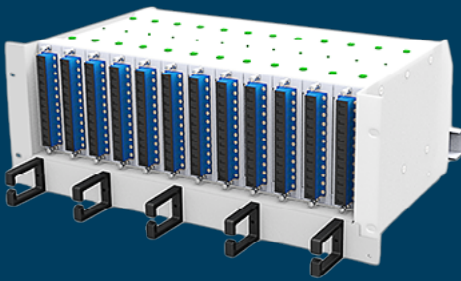

Optical Power Management

Designed to meet the requirements of any fibre optic communication system that demands branching and distribution of the optical signal to multiple endpoints.

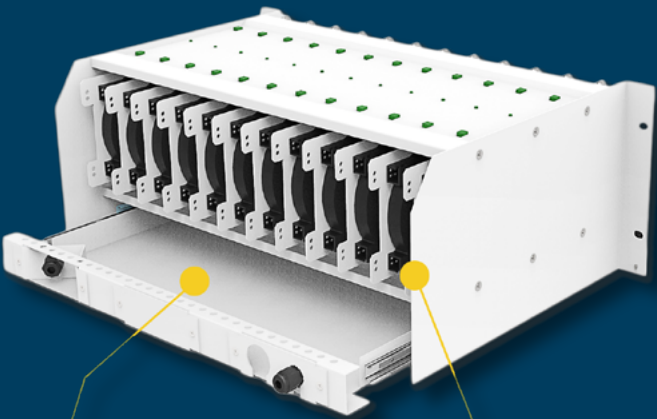
- Support PLC and FBT technology
- Low insertion loss over the whole temperature range
- Balanced and unbalanced models



Model: TEN-ODF1	
	TEN-ODF1- 24/SC 48/LC 1U ODF - Hinged Drawer On-line Information
Model: TEN-ODF2	
	TEN-ODF2 - 24/SC - 96/LC 1U/2U ODF - Slidable Drawer On-line Information
Model: TEN-ODF3	
	TEN-ODF3 - 24/SC 48/LC 1U 1U ODF - Slidable Drawer On-line Information
Model: TEN-ODF4	
	TEN-ODF4 1U ODF - Slidable Drawer On-line Information

Model: TEN-ODF5	
	TEN-ODF5 - 3U Chassis + 1U Drawer 4U ODF - Slidable Drawer On-line Information
Model: LGX Series	
	Space saving installations Chassis/Frames, WDM, CWDM, DWDM, Splitter LGX modules On-line Information

Our unique 4U system is specifically targeted for headends and data centres



Space for Over-Length Cabling

The system is designed with a 1U drawer that conveniently stores/organises over-length cabling

High Density

High density system equipped with 12 module slots

POINT OF CONNECTION SOLUTIONS FLEXIBILITY AND MODULARITY

Our pre-assembled Point-of-Connection solutions consist of customised products to suit operator's needs. The solutions are designed for ease of use and come with the usual high level of Teleste quality.



Point-of-Connection Platform

Teleste tailor-make PoC solutions for operators different network architectural needs. Our solutions are supplied within their own purpose designed enclosures or alternatively we fit into existing cabinets as required. Internal RF and/or optical equipment are supplied to support various node sizes.



Designed for the following network architectures

- Electrical Input to Electrical Output
- Optical Input to Electrical Output
- Electrical Input to Optical Output
- Optical Input to Optical Output



UPoC Underground Platform

Teleste tailor made solution for underground placement of Point of Connection Platforms. Designed to fit into existing underground chambers where normal cabinet solutions are not possible or allowed.

Highlights

- Supports up to 48 customer connection points
- Hosts up to 6 – 1 x 8 Splitters
- Hosts up to 2 Network side and 6 Customer side splice trays
- 48 individual Subscriber micro-ducts management



LET US **enlighten** YOUR FIBRE NETWORKS

TAILORED NETWORK SOLUTIONS CUSTOMISED ASSEMBLIES

Teleste offer a wide range of solutions for operator's comprising of cabinet and optical passive needs. We offer a complete service, working alongside our customers to identify their need, design a solution and full production backed up by QC and Approval Testing.

// We have the best people and processes in the industry, and continuously improve our customer satisfaction



Pre-Assembled Product Solutions

We have over 60 years' experience in the design and production of products and solutions to fulfil customer's requirements. Our solutions can be supplied with their own metal or plastic enclosures or alternatively they can be manufactured to integrate into customer's existing installations.

- Flexible fibre connectivity and presentation
- Robust duct and cable management
- Various fibre organisers
- Flexible configurations to suit needs
- Multiple variants available and support optical and electrical network architectures

Teleste pre-assembled solutions provide operators with cost effective faster network roll-outs with improved quality and less problems compared to field installations.

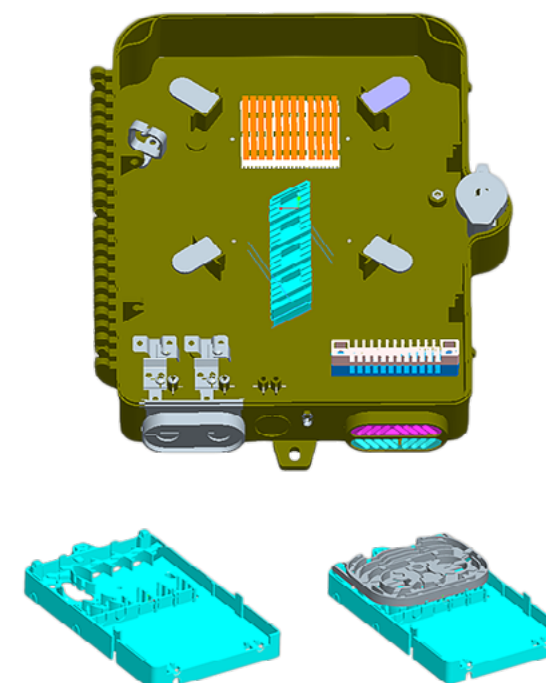


True Customisation Power

Teleste pre-assembled solutions provide operators with cost effective faster network roll-outs with improved quality and less problems compared to field installations. Our customization solutions have over the last 65 years proven to provide increasing efficiency, reducing complexity and ensuring maximum optimization - we develop high quality products with care and detail in design, build, QA and shipping processes.

Typical customization processes include:

- Fibre assembly
- Fibre testing
- Component assembly
- Final assembly and QC





TELESTE

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