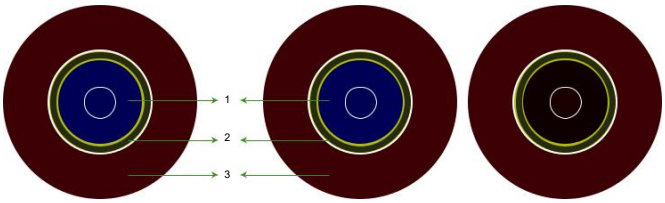
Simplex/Zip Duplex

a10002:RT002:----SE

Product Details

Anatolia Tight Buffer Simplex / Zip Duplex Cables are an integral part of the end-to-end fibre optic solution, designed to support enhanced data needs along with future advancing network requirements.Simplex Fibre Optic Cable consists of a single fibre,tight-buffered (coated with a 900 micron buffer over the primary buffer coating) with Kevlar (aramid fibre) strength members and jacketed for indoor use. Where in duplex fibre optic cables consist of two fibres joined by a thin connection between the two jackets. Fibre is either single mode or multimode.

Typical Construction of Cable



1. COLOURED TIGHT BUFFERED FIBRES
2. PHERIPHERAL STRENGTH MEMBERS- ARAMID YARNS
3. OUTER SHEATH

Product Application

Simplex Cables are used mostly for patch cord and backplane applications. Analog to digital data readouts, interstate highway sensor relays, and automated speed and boundary sensors (for sports applications)
Duplex Cables are used in applications where data needs to be transferred bi-directionally. One fibre transmits data one direction; the other fibre transmits data in the opposite direction. Larger workstations, switches, servers, and major networking hardware tends to require duplex fibre optic cable. Ideal for applications involving safety requirements in case of fire

Features & Benefits

- 900 Microns Tight buffered fibres supports fast field installations
- Easy jacket removal using standard tools.
- Small & flexible makes it ideal for confined spaces.
- Patch panels & work station equipment connections.
- Horizontal & riser distribution in open office environment.
- Variant available in terms of color & fibre type.
- Building interconnection (Campus LAN)
- Trunking lines direct to Telecommunication closet.
- Links between electronic equipment & fibre patch panel.
- Available in 2mm and 3mm Diameter with all fibre variants.
- Tightly controlled physical parameters.

Performance Standards

Cable complies to the following Standards IEC.60794 series, ANSI/ICEA S-87-640, Telecordia GR-20, ITU-T Recommendations, GR-409, IEC 60332-1, IEC 60332-3-22/24 Flame Standards

Specifications

Physical Characteristics					
Fibre Count		Simplex	Simplex	Duplex	Duplex
Nominal Diameter (mm) ± 0.2mm		3.0	2.0	3.0 x 6.2	2.0 x 4.2
Nominal Weight (kg/km) ± 10%		9.0	4.0	18.0	8.0
Mechanical and Environmental Characteristics*					
Test	Standard / Notes	Product Performance			
Max. Tensile Strength (N)	IEC-60794-1-21-E1	150	100	200	150
Bending Radius	IEC-60794-1-21-E11	Dynamic = 10D, Static = 15D (D = Cable diameter)			
Crush Resistance (N/100mm)	IEC-60794-1-21-E3	500	300	500	300
Temperature Cycling	IEC-60794-1-22-F1	Installation: -10ºC to +60ºC	Operation: -20ºC to +70ºC	Storage: -30ºC to +70ºC	

** After the test, the change in attenuation shall be ≤ 0.05 dB/km. No damage or crack on cable & no fibre break.

Cabled Optical Fibres Characteristics

The optical fibres are in accordance to the specifications ITU-T G.657A1, ITU T 651 OM1, OM2, OM3& OM4. Refer to specific data sheets for details

Attenuation coefficient, dB/km (Average/Maximum)				
Fibre Type	850nm	1300nm	1310nm	1550nm
G657A1	-	-	≤ 0,40	≤ 0,30
OM1	≤ 3.5	≤ 1.5	-	-
OM2	≤ 3.5	≤ 1.5	-	-
OM3	≤ 3.5	≤ 1.5	-	-
OM4	≤ 3.5	≤ 1.5	-	-

Fibre Colour – Natural / Tranparent

Simplex / Duplex Standard Colour Code –

SM – Yellow, OM1 - Orange, OM2 – Orange, OM3 – Aqua, OM4 - Violet

Packing and Lengths

Packing: Wooden Reels

Lengths (tolerance ±5%): 500, 1000, 2000 meters

Note - Customised drum lengths available on request.

Sheath printing details

Anatolia < Fibre Type ><Fibre Count><Product Type ><OFC Laser Symbol ><Telephone Symbol ><Month & Year of Production><Cable ID>< Meter Marking>

Tight Buffer Riser

a10024:RT024:-F--SE

Product Details

Anatolia Tight Buffer Riser Cables are an integral part of the end-to-end fibre optic solution, designed to support enhanced data needs along with future advancing network requirements.These cables are intended for riser application in multi storey buildings. Tight buffered fibres are reinforced with aramid yarns and sheathed with Low Smoke Zero Halogen (LSZH). This cable is suitable for both indoor / outdoor application with standard commercial type connectors.

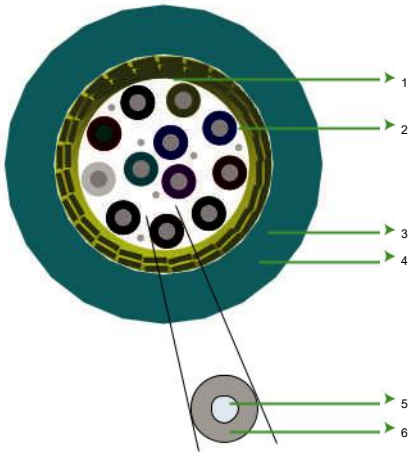
Product Application

These cables are specifically designed for indoor/ outdoor applications, mainly used in intra-building backbones, routing between telecommunications rooms and as a riser cable in Multi Storey buildings.

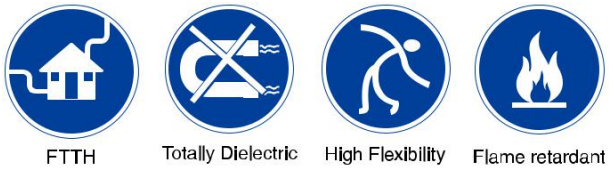
Features & Benefits

- Available upto 24 fibre count in either Single Mode and Multimode Optical Fibres
- 900 Microns Tight buffered fibres supports fast field installations
- Reduce installation time and costs.
- Easy jacket removal using standard tools.
- Flexible and Fire retardant outer sheath with aramid yarns as tensile elements helps in easy installation in space constrained areas
- LSZH sheath makes cable suitable for higher fire safety requirement
- Small cable diameter & lightweight
- Requires no grounding or bonding due to all-dielectric construction
- Tightly controlled physical parameters.
- Combination of fibre types available on request
- 24F Available with Stripe marked 24 tight buffers or with 2 Bundle binder design.
- Cable also available with Nylon Tight buffer for harsh indoor / outdoor application

Typical Construction of Cable



1. LSZH TIGHT BUFFER WITH Fibre
2. STRENGTH YARNS (ARAMID YARNS)
3. RIPCORD
4. OUTER SHEATH
5. NATURAL FIBRE (UNCOLORED)
6. TIGHT BUFFER



Performance Standards

Cable complies to the following Standards IEC.60794 series, ANSI/ICEA S-87-640, Telecordia GR-20, ITU-T Recommendations, GR-409, IEC 60332-1, IEC 60332-3-22/24 Flame Standards

Specifications

Physical Characteristics				
Fibre Count	6	8	12	24
Nominal Diameter (mm) ± 0.3mm	6.0	7.0	7.5	9.5
Nominal Weight (kg/km) ± 10%	35.0	45.0	50.0	80.0

Mechanical and Environmental Characteristics*				
Test	Standard / Notes	Product Performance		
Max. Tensile Strength (N)	IEC-60794-1-21-E1	660		
Bending Radius	IEC-60794-1-21-E11	Dynamic = 15D, Static = 20D (D = Cable diameter)		
Crush Resistance (N/100mm)	IEC-60794-1-21-E3	500		
Torsion	IEC-60794-1-21-E7	± 180°		
Temperature Cycling	IEC-60794-1-22-F1	Installation: -10ºC to +60ºC	Operation: -20ºC to +70ºC	Storage: -30ºC to +70ºC

** After the test, the change in attenuation shall be ≤ 0.01 dB/km. for SM and 0.3dB/km for MM fibre

Cabled Optical Fibres Characteristics

The optical fibres are in accordance to the specifications ITU-T G.657A1, ITU T 651 OM1, OM2, OM3& OM4. Refer to specific data sheets for details

Attenuation coefficient, dB/km (Average/Maximum)				
Fibre Type	850nm	1300nm	1310nm	1550nm
G657A1	-	-	≤ 0,40	≤ 0,30
OM1	≤ 3.5	≤ 1.5	-	-
OM2	≤ 3.5	≤ 1.5	-	-
OM3	≤ 3.5	≤ 1.5	-	-
OM4	≤ 3.5	≤ 1.5	-	-

Fibre Colour – Natural / Tranparent

Simplex / Duplex Standard Colour Code –

SM – Yellow, OM1 - Orange, OM2 – Orange, OM3 – Aqua, OM4 - Violet

Tight Buffer Colour Code

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

* For more than 12 tubes, single or double stripes marking are done as per EIA/TIA 598.

Packing and Lengths

Packing: Wooden Reels with protection

Lengths (tolerance ±5%): 500,1000, 2000 mtrs

Note - Customised drum lengths available on request.

Sheath printing details

Anatolia < Fibre Type ><Fibre Count><Product Type ><OFC Laser Symbol ><Telephone Symbol ><Month & Year of Production><Cable ID>< Meter Marking>

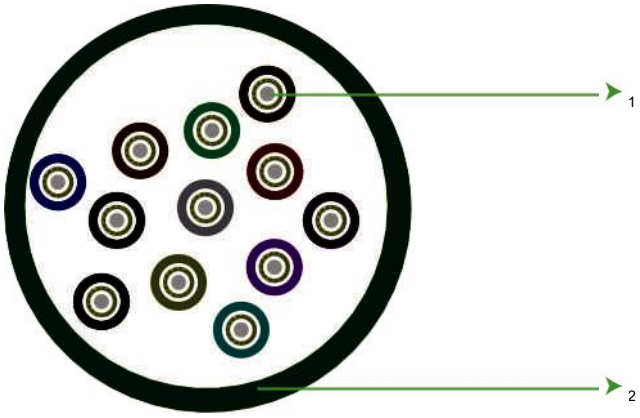
Mini Breakout

a10024:DT024:-F--SE

Product Details

Anatolia Mini Breakout Cables are an integral part of the end-to-end fibre optic solution, designed to support enhanced data needs along with future advancing network requirements.These cables are intended for indoor / outdoor application with mid fibre tapping facility in multi-storey buildings. Cable contains an acrylic coated optical fibre surrounded by aramid yarns and tight buffered with LSZH material; such tight buffers are reinforced with aramid yarns and sheathed with Low Smoke Zero Halogen (LSZH). This cable is suitable for indoor FTTH applications through ducts in multi-storey building.

Typical Construction of Cable



1. SIMPLEX WITH Fibre
2. OUTER SHEATH

- Easy jacket removal using standard tools
- LSZH Sheath makes cable suitable for higher fire safety requirement
- Flexible outer sheath with aramid yarns as tensile elements helps in easy installation in space constrained areas
- Small cable diameter & lightweight
- Requires no grounding or bonding due to all-dielectric construction
- Tightly controlled physical parameters
- Combination of fibre types available on request
- Tightly controlled physical parameters
- Combination of fibre types available on request

Product Application

The individual tight buffer of the cable makes the installation easier to tap the tight buffer to extract them in the riser boxes and to strip the fibre. The cable facilitates quick mid spanning of the cable. Cable is suitable for central offices/data centers to connect network devices to optical distribution frames.

Performance Standards

Cable complies to the following International Standards IEC.60794 series, ANSI/ICEA S-87-640, ITU-T Recommendations, GR-409, IEC 60332-1, IEC 60332-3-22/24 Flame Standards,

Specifications

Physical Characteristics			
Fibre Count	12	24	
Nominal Diameter (mm) ± 0.3mm	8.5	9.5	
Nominal Weight (kg/km) ± 10%	65.0	70	
Mechanical and Environmental Characteristics			
Test	Standard / Notes	Product Performance	
Max. Tensile Strength (N)	IEC-60794-1-21-E1	500 N	
Bending Radius	IEC-60794-1-21-E11	Dynamic = 10D, Static = 15D (D = Cable diameter)	
Crush Resistance (N/100mm)	IEC-60794-1-21-E3	500	
Torsion	IEC-60794-1-21-E7	± 180°	
Temperature Cycling	IEC-60794-1-22-F1	Installation: -5ºC to +55ºC	Operation: -5ºC to +55ºC / Storage: -5ºC to +60ºC

** After the test, the change in attenuation shall be ≤ 0.05 dB/km. No damage or crack on cable & no fibre break.

Cabled Optical Fibres Characteristics

The optical fibres are in accordance to the specifications ITU-T G.657A1, ITU T 651 OM1, OM2, OM3 & OM4. Refer to specific data sheets for details

Attenuation Co-efficient, dB/km (Maximum)				
Fibre Type	850nm	1300nm	1310nm	1550nm
G657A1	-	-	≤ 0,40	≤ 0,30
OM1	≤ 3.5	≤ 1.5	-	-
OM2	≤ 3.5	≤ 1.5	-	-
OM3	≤ 3.5	≤ 1.5	-	-
OM4	≤ 3.5	≤ 1.5	-	-

Fibre Colour – Natural / Transparent

Cable Colour Code –

SM – Yellow, OM1 - Orange, OM2 – Orange, OM3 – Aqua, OM4 - Violet

Mini Breakout Colour Code

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

* For more than 12 tubes, single or double stripes marking are done as per EIA/TIA 598.

Packing and Lengths

Packing: Wooden Reels

Lengths (tolerance ±5%): 500, 1000, 2000 mtrs

Note - Customised drum lengths available on request.

Sheath printing details

Anatolia < Fibre Type ><Fibre Count><Product Type ><OFC Laser Symbol ><Telephone Symbol ><Month & Year of Production><Cable ID>< Meter Marking>

Easy Strip Flat

a10002:DT002:-F--SE

Product Details

Anatolia Drop-LITE™ Easy Strip Flat Cable is an enhanced performance FTTH solution, constructed with one/two single mode /bend sensitive fibres, protected by two strength members and covered with outer sheath which makes the cable robust and installation friendly. This cable is very light and easy to install and strip. Industry standard connectors can be used for direct termination because of standard 250µm fibre size. Colored fibre is for easy identification. Low Smoke Zero Halogen Compound Jacket is appropriate for indoor use.

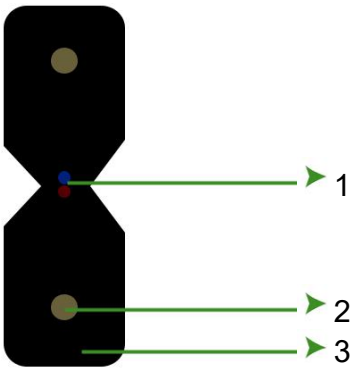
Product Application

These cables can be used for indoor applications and last link for the FTTX Networks, Indoor riser level and plenum level cable distribution and for connecting Main distribution frame to consolidation point in home, apartment or offices

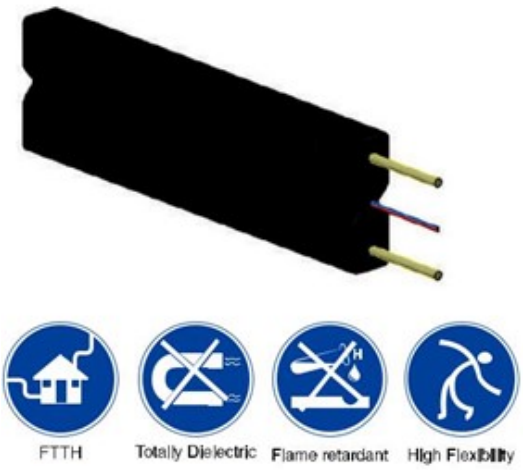
Features & Benefits

- Available in 1 or 2 fibre count in either single-mode or multi-mode optical fibres
- Special low-bend-sensitivity fibre provides high bandwidth and excellent communication transmission property
- Two parallel strength members ensure good performance of crush resistance to protect the fibre
- Simple structure, light weight and high practicability
- More bandwidth, reliability and low cost
- Novel flute design, easily strip and splice, simplify the installation and maintenance
- Low smoke, zero halogen and flame retardant sheath
- Industry standard connectors can be used for direct Termination
- Tightly controlled physical parameters
- Combination of fibre types available on request

Typical Construction of Cable



1. COLORED FIBRES
2. EMBEDDED STRENGTH MEMBERS
3. OUTER SHEATH



Anatolia Telecom Cabling Systems sales@anatoliacom.com Istanbul Turkey

Performance Standards

Cable Complies to the following main Standards IEC.60794 series, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T Recommendations, GR-409, RoHS

Specifications

	Physical Characteristics		
Fibre Count	1-2		
Nominal Cable Height x Widthr (mm) ± 0.2mm	2.0 X 3.0		
Nominal Cable Weight (kg/km) ± 10%	10		
Mechanical and Environmental Characteristics			
Test	Standard / Notes	Product Performance	
Max. Tensile Strength (N)	IEC-60794-1-21-E1	150	
Bending Radius	IEC-60794-1-21-E11	Dynamic = 15D, Static = 10D	
Crush Resistance (N/100mm)	IEC-60794-1-21-E3	1000	
Impact strength (N.m)	IEC-60794-1-21-E4	4	
Torsion	IEC-60794-1-21-E7	± 180°	
Drip Test	IEC-60794-1-21-E14	30 cm, 70ºC, 24 hr	
Temperature Cycling	IEC-60794-1-22-F1	Installation: -10ºC to +60ºC	Operation: -20ºC to +70ºC / Storage: -30ºC to +70ºC
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hrs no water leakage	

** After the test, the change in attenuation shall be ≤ 0.05 dB/km. No damage or crack on cable & no fibre break.

Cabled Optical Fibres Characteristics

The optical fibres are in accordance to the specifications ITU-T G.657A1. Refer to specific datasheets for details.

Transmission Characteristics						
	Attenuation coefficient, dB/km (Average/Maximum)			PMD,	PMD LDV	Cut-off Wavelength (lcc), nm
Fibre Type	1310nm	1550nm	1625nm	ps/√km	ps/√km	1310nm
G657A1 fibre	≤ 0,4	≤ 0,3	≤ 0,4	≤ 0 ,20	≤ 0,1	≤ 1260

Tube / Fibre Standard Colour Code (As per EIA/TIA 598)

1	2
Blue	Orange

Packing and Lengths

Packing: Plastic drums

Lengths (tolerance ±5%): 500, 1000 Mtrs

Note - Customised drum lengths available on request.

Sheath printing details

Anatolia < Fibre Type ><Fibre Count><Product Type ><OFC Laser Symbol ><Telephone Symbol ><Month & Year of Production><Cable ID>< Meter Marking>

Anatolia Telecom Cabling Systems
Turkey
sales@anatoliacom.com
Istanbul