



Beyondtech PureOptics™ Aerial Self-Supported Unique Buffer

Order Code: BTASUA

This ASU fiber optic cable is designed for aerial FTTH (Fiber to the Home) installations, built with a durable structure that includes dual reinforced strength members and a weather-resistant HDPE outer sheath. It's engineered to perform reliably in challenging outdoor environments, providing excellent signal integrity and low attenuation, making it ideal for sustained, high-quality performance in harsh conditions.

FEATURES AND BENEFITS

- **Purpose-Built for FTTH:** This ASU cable is specifically designed for aerial Fiber to the Home applications, making it an excellent choice for self-supporting installations.
- **Reinforced Structure:** The cable includes robust reinforcement elements to withstand environmental stresses and maintain durability in demanding conditions.
- **Weather-Resistant Sheathing:** With a protective outer layer, the cable resists environmental wear, ensuring reliable, long-term outdoor performance.
- **High Signal Quality:** Designed for minimal signal loss, it maintains consistent and clear data transmission, even across long distances.
- **Wide Operational Range:** Suitable for various climates, the cable can handle extreme temperatures, providing stable performance year-round.

SPECIFICATIONS

Fiber Type:
Single-mode G.652.D

Wavelengths:
1310 nm, 1490 nm, 1550 nm and 1625 nm

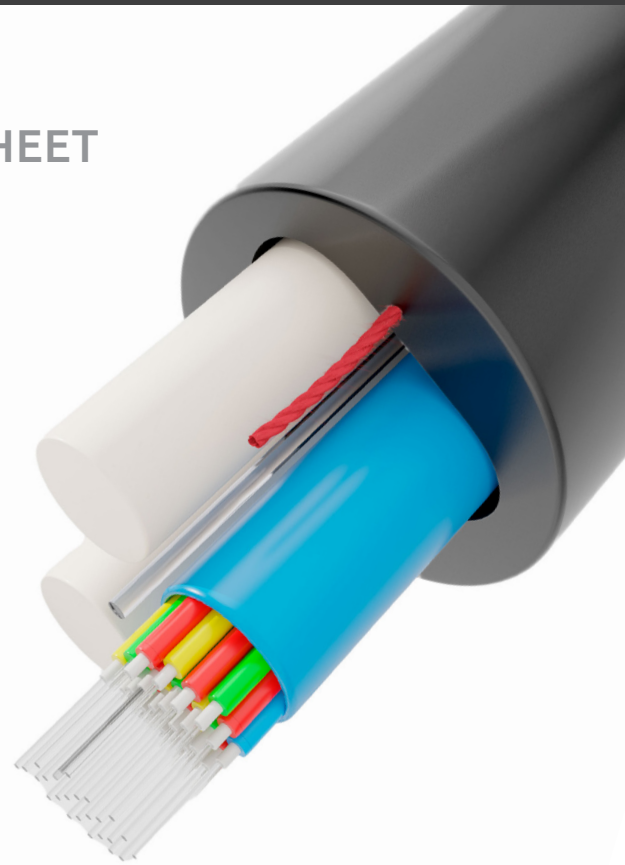
Number of Fibers:
2, 4, 6, 8, or 12 Strings

Jacket Material:
High-Density Polyethylene (HDPE)

Color Coding:
EIA/TIA-598

OD of cable(mm):
6.6±0.2

Test Methodology:
IEC 60794-1-2 Method E1A
IEC 60794-1-2 Method E3
IEC 60794-1-2 Method F1
IEC 60794-1-2 Method F5
IEC 60794-1-2 Method E11



Mechanical Specifications

CABLE TYPE	FIBER COUNT	CABLE DIAMETER (MM)	CABLE WEIGHT (KG/KM)	TENSILE STRENGTH (N) (LONG/SHORT TERM)	CRUSH RESISTANCE (N/100MM) (LONG/SHORT TERM)	SUITING LINE VOLTAGE CLASS (KV)	SPAN (M)
BTASUA	2	6.6 ± 0.02	40	300/800	300/1000	≤ 35	80
BTASUA	4	6.6 ± 0.02	40	300/800	300/1000	≤ 35	80
BTASUA	6	6.6 ± 0.02	40	300/800	300/1000	≤ 35	80
BTASUA	8	6.6 ± 0.02	40	300/800	300/1000	≤ 35	80
BTASUA	12	6.6 ± 0.02	40	300/800	300/1000	≤ 35	80

CABLE TYPE	FIBER COUNT	STRENGTH MEMBER (MM)	SUITABLE METEOROLOGICAL CONDITION	SUITABLE METEOROLOGICAL CONDITION	TEMPERATURE	CERTIFICATES
BTASUA	2	FRP*2 / 1.8±0.01	Kevlar (1 Unit)	Max Wind: 60 km/h, No Icing	-40°C to +60°C (Operation), -10°C to +50°C (Installation)	ISO9001, UL, RoHS, CPR (EN 50575)
BTASUA	4	FRP*2 / 1.8±0.01	Kevlar (1 Unit)	Max Wind: 60 km/h, No Icing	-40°C to +60°C (Operation), -10°C to +50°C (Installation)	ISO9001, UL, RoHS, CPR (EN 50575)
BTASUA	6	FRP*2 / 1.8±0.01	Kevlar (1 Unit)	Max Wind: 60 km/h, No Icing	-40°C to +60°C (Operation), -10°C to +50°C (Installation)	ISO9001, UL, RoHS, CPR (EN 50575)
BTASUA	8	FRP*2 / 1.8±0.01	Kevlar (1 Unit)	Max Wind: 60 km/h, No Icing	-40°C to +60°C (Operation), -10°C to +50°C (Installation)	ISO9001, UL, RoHS, CPR (EN 50575)
BTASUA	12	FRP*2 / 1.8±0.01	Kevlar (1 Unit)	Max Wind: 60 km/h, No Icing	-40°C to +60°C (Operation), -10°C to +50°C (Installation)	ISO9001, UL, RoHS, CPR (EN 50575)

Optical and Mechanical Properties of G652.D and G657.A2 Fibers

CHARACTERISTICS	UNIT	G652.D	G657.A2
Fiber type	Type	G652.D	G657.A2
Attenuation at 1310 nm	dB/km	~0.35 dB/km	~0.35-0.40 dB/km
Attenuation at 1550 nm	dB/km	~0.20 dB/km	~0.21-0.25 dB/km
Attenuation at 1625 nm	dB/km	~0.30 dB/km	~0.25-0.30 dB/km
Chromatic Dispersion at 1310 nm	ps/nm·km	~0 ps/nm·km	
Chromatic Dispersion at 1550 nm	ps/nm·km	~17 ps/nm·km	
Bending Tolerance	Qualitative	Low	High
Zero Dispersion Slope	ps/nm²·km	~0.092 ps/nm²·km (at λ ₀)	
Zero Dispersion Wavelength (λ ₀)	nm	1300-1324 nm (typical ~1310 nm)	
Cut-off Wavelength (λ _{cc})	nm	≤1260 nm	
Attenuation vs. Bending (60mm x 100 turns) at 1310 nm	dB	~0.8-1.2 dB	≤0.03 dB
Attenuation vs. Bending (60mm x 100 turns) at 1550 nm	dB	~1.5-2.5 dB	≤0.03 dB
Mode Field Diameter (MFD) at 1310 nm	μm	8.6 - 9.2 μm	8.6 - 9.0 μm
Mode Field Diameter (MFD) at 1550 nm	μm	9.5 - 10.5 μm	9.0 - 9.5 μm
Core-Clad Concentricity Error	μm	≤0.5 μm	
Cladding Diameter	μm	125 ± 1 μm	
Cladding Non-circularity	%	≤0.8%	≤0.8%
Coating Diameter	μm	245 ± 10 μm	245 ± 10 μm
Proof Test	GPa	≥0.69 GPa (69 kpsi)	≥0.69 GPa (69 kpsi)

The provided cable specifications, including performance and structural details, are for reference only and may vary slightly due to manufacturing or environmental factors. These variations should not affect overall quality but could impact specific parameters. For accurate details, consult Beyondtech's technical team.

A Beyondtech	B Cable Outer Sheath: • LSZH (Low Smoke Zero Halogen) • PE (Polietileno) • HDPE (High Density PE) • PVC (Polyvinyl Chloride)	C Strength Member type: • FRP: Fiber-reinforced polymer • KFRP: Kevlar-reinforced Polymer • AFRP: Aramid-reinforced Polymer • SW: Steel Wire
D Ripcord Type: • Nylon • Polyester • Aramid	E N° Fibers: 2, 4, 6, or 12	F Standard : • G.652.D • G.657.A1 • G.657.A2 • G.657.B3

Other options are available.
Ask your Beyondtech sales representative.

Custom cabling per request



For more information on Beyondtech Premium Warranty, visit beyondtech.us/warranty

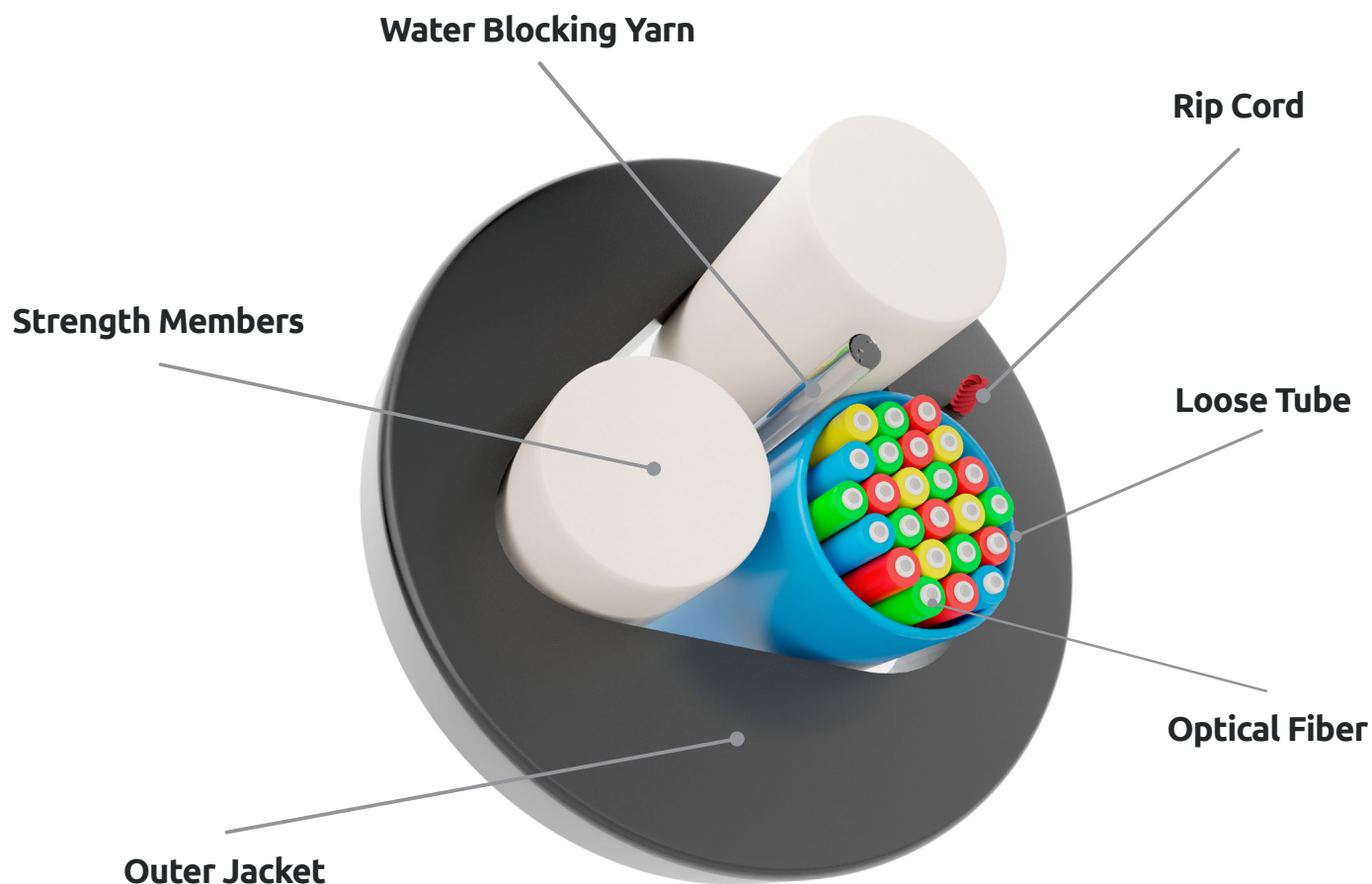


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