# ALTOS<sup>®</sup> Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable

192 F, 50 µm multimode (OM2)



ALTOS® gel-free, double-jacket, single-armored cables are rugged, armored cables designed for direct-buried installation while suitable for duct and aerial (lashed) installation. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber.

### **Features and Benefits**

## Gel-free waterblocking technology

Craft-friendly cable preparation

### Corrugated steel tape armor

Provides rodent resistance for direct-buried applications

### Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

#### SZ-stranded, loose tube design

Isolates fibers from installation and environmental rigors and facilitates mid-span access

### Dielectric central strength member

No preferential bend and requires no bonding or grounding

### Medium-density polyethylene jacket

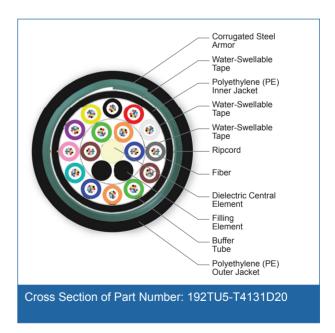
Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

### **Standards**

**Approvals and Listings** USDA Rural Development Programs

Design and Test Criteria Telcordia GR-20, ICEA-640





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# **Specifications**

General Specifications	
Environment	Outdoor
Application	Aerial, Direct Buried
Cable Type	Loose Tube
Product Type	Armored
Fiber Category	50 μm MM (OM2)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	192
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	18
Number of Active Tubes	16
Buffer Tube Color Coding, Layer 1	Blue, Orange, Green, Brown
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	2
Tape	Water-swellable
Buffer Tube Color Coding, Layer 2	Slate, White, Red, Black, Yellow, Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*
Tape, Layer 2	Water-swellable
Inner Jacket Material	Polyethylene (PE)
Tape, Layer 3	Water-swellable
Number of Ripcords	3
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

Notes: Tubes 13 to 24 include a co-extruded stripe that is white for the black tube and black for all other tube colors.



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Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)
Weight	312 kg/km (209 lb/1000 ft)
Nominal Outer Diameter	19.9 mm (0.78 in)
Min. Bend Radius Installation	299 mm (11.8 in)
Min. Bend Radius Operation	199 mm (7.8 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

## Fiber Specifications

Optical Characteristics (cabled)		
Fiber Core Diameter	50 μm	
Fiber Category	OM2	
Fiber Code	Т	
Performance Option Code	31	
Wavelengths	850 nm / 1300 nm	
Maximum Attenuation	3.0 dB/km / 1.0 dB/km	
Serial 1 Gigabit Ethernet	750 m / 500 m	
Serial 10 Gigabit Ethernet	150 m / -	
Min. Overfilled Launch (OFL) Bandwidth	700 MHz*km / 500 MHz*km	
Minimum Effective Modal Bandwidth (EMB)	950 MHz*km / -	

Notes: 1) 50  $\mu m$  multimode fiber macrobend loss  $\leq$  0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

- 2) Improved attenuation and bandwidth options available.
- 3) Bend-insensitive single-mode fibers available on request.
- 4) Contact a Corning Customer Care Representative for additional information.

## **Ordering Information**

Part Number	192TU5-T4131D20
Product Description	ALTOS® Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable, 192 F, 50 µm multimode (OM2)
EAN Code	4056418166780



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CORNING

**Notes** 



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