## ALTOS<sup>®</sup> Lite<sup>™</sup> Low-Temperature, Loose Tube, Gel-Filled, Single-Jacket, Single-Armored Cable

**CORNING** 

144 F, 50 µm multimode (OM2)

Corning ALTOS® low-temperature cables are designed for extreme cold temperature environments with an extended operating range of -50° to +70°C (-58° to +158°F). Dielectric and armored jackets allow for duct, direct-buried or aerial (lashed) installation.

#### **Features and Benefits**

Extended operating temperature range of -50° to +70°C (-58° to +158°F)

Allows for operation at extreme low temperatures

#### Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

#### Innovative waterblocking design

Provides efficient and craft-friendly cable preparation

#### 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

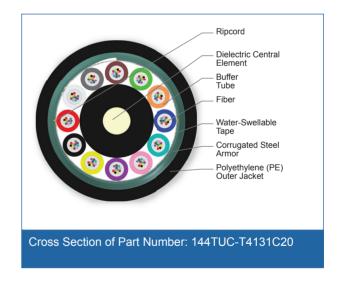
#### Medium-density polyethylene jacket

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
Common Installations	Designed for Direct-Buried and Aerial Applications
Design and Test Criteria	Telcordia GR-20, ICEA-640





## **Specifications**

General Specifications	
Environment	Outdoor
Application	Aerial, Direct Buried, Duct
Cable Type	Loose Tube



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General Specifications	
Product Type	Armored
Fiber Category	50 μm MM (OM2)

Temperature Range	
Storage	-50 °C to 70 °C (-58 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-50 °C to 70 °C (-58 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	144
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	12
Number of Active Tubes	12
Buffer Tube Color Coding	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Buffer Tube Diameter	2.5 mm (0.1 in)
Tape	Water-swellable
Inner Jacket Material	Polyethylene (PE)
Tape, Layer 2	Water-swellable
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Number of Ripcords	3
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)
Weight	262 kg/km (176 lb/1000 ft)
Nominal Outer Diameter	17.5 mm (0.69 in)
Min. Bend Radius Installation	263 mm (10.3 in)
Min. Bend Radius Operation	175 mm (6.9 in)



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<b>Chemical Characteristics</b>	
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	T
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 µm multimode fiber macrobend loss ≤ 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	144TUC-T4131C20
Product Description	ALTOS® Lite™ Low-Temperature, Loose Tube, Gel-Filled, Single-Jacket, Single-Armored Cable, 144 F, 50 µm multimode (OM2)
EAN Code	4056418167343



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm
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