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

CORNING

48 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

# Ripcord Dielectric Central Element Fiber Buffer Tube Water-Swellable Tape Corrugated Steel Armor Filling Element Polyethylene (PE) Outer Jacket Cross Section of Part Number: 048TUC-T4131C20

### **Specifications**

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



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



48 F, 50 µm multimode (OM2)

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	48
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	6
Number of Active Tubes	4
Buffer Tube Color Coding	Blue, Orange, Green, Brown
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	2
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	136 kg/km (91 lb/1000 ft)
Nominal Outer Diameter	12.1 mm (0.48 in)
Min. Bend Radius Installation	182 mm (7.1 in)
Min. Bend Radius Operation	121 mm (4.8 in)



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



48 F, 50 µm multimode (OM2)

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	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	048TUC-T4131C20
Product Description	ALTOS® Lite™ Low-Temperature, Loose Tube, Gel-Filled, Single-Jacket, Single-Armored Cable, 48 F, 50 µm multimode (OM2)
EAN Code	4056418159355



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

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified.

© 2016 Corning Optical Communications. All rights reserved.

