

**Contact**

Fiber LAN Product Inquiry  
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## CL3R-OF Composite Fiber Cable

Berk-Tek's Composite Copper/Fiber cables incorporate high bandwidth optical fibers with insulated stranded copper TFFN or THWN conductors. A wide variety of design options are available including; up to 7 conductors ranging from #12 AWG to #18 AWG, up to 12 tight buffered fibers or 24 loose tube fibers, and interlock armoring. These cables are listed as CL3R-OF/PLTC-OF. A key application of these cables is to extend the distance that powered devices can be installed from the power source in Power over Ethernet (PoE+) installations. Proper conductor size selection can increase this distance from 328 feet to several thousand feet. The powered device could be an IP camera, a wireless access point, or other building automation device located in an area where an electrical outlet is not readily available.

### Description

#### Construction

Each cable consists of multiple TFFN or THWN copper conductors and multiple fibers cabled together within an outer jacket. Cable design accommodates from 2 to 7 conductors and 2 to 24 fibers.

- Fibers can be tight buffered or in a loose tube
- Cable is dry-waterblocked for outdoor installations
- Aluminum (standard) or steel interlock armored cables available

#### Applications

Berk-Tek's Composite cables are suitable for all power limited applications where optical fibers are needed. Specific applications include (but not limited to):

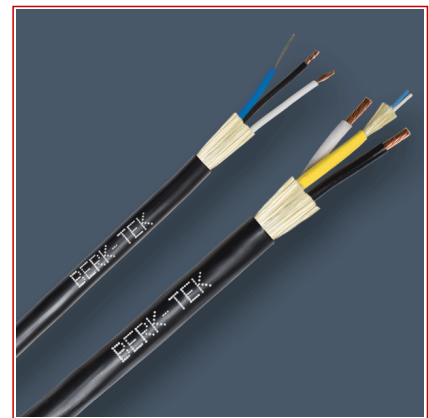
- Power over Ethernet (PoE+) length extension
- Combining control and communication in industrial pathways
- Common pathway for fiber backbone and Class 3 power supply
- 10BASE-FL
- 100BASE-SX/100BASE-FX

#### Features

- Multimode, Single-mode, and GIGAlite™ fibers
- CL3R-OF, wet and dry rated
- Aluminum or steel interlock armored designs available
- Oil resistant designs available
- Indoor/Outdoor dry water-blocked design

#### Benefits

- Enables PoE+ equipment to be located more than 100 meters from the switch
- Cost savings versus installation of a new electrical outlet
- CL3R-OF/PLTC-OF allows cable to be installed in communication pathways
- Ease of installation
- Broad design selection allows for mix and match of copper and fiber components to specific networking applications
- Armor option adds crush resistance and protection from rodent attacks



#### Standards

**International** EN 50173; ISO/IEC 11801

**National** ANSI/ICEA S-104-696; TIA/EIA-568-B ; Telcordia GR-409; UL 13

## CL3R-OF Composite Fiber Cable

### Sheath Colors

Fiber Type	ISO-TIA Standard	Effective Modal BW @ 850 nm	Overfilled Launch BW @ 850 nm	Attenuation @ 850 nm	Attenuation @ 1300 nm	Attenuation @ 1550 nm	Sheath Color
AB	OS1	NS	NS	NS	0.7 dB/km	0.7 dB/km	Black
CB	OM1	200 MHz-km	200 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black
GB	OM1	500 MHz-km	350 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black
ZB	OM2	500 MHz-km	500 MHz-km	3.5 dB/km	1.5 dB/km	NS	Black
LB	OM2+	950 MHz-km	700 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
EB	OM3	2000 MHz-km	1500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
FB	OM4	4700 MHz-km	3500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
XB	OM4+	4900 MHz-km	3675 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black

NS = Not Specified

### Product List

☎=Make to order, 📦=Make to stock

Part Number	Description
☎ LTRC012CB3510/25-002X12AWG	Composite 12 Fiber OM1 with Two 12 AWG Stranded Conductors, Dry Loose Tube
☎ OPRC012CB3510/25-002X12AWG	Composite 12 Fiber OM1 with Two 12 AWG Stranded Conductors, Filled Loose Tube
☎ LTRC06B012CB3510/25-002X18AWG	Composite 12 Fiber OM1 with Two 18 AWG Stranded Conductors, Dry Loose Tube
☎ OPRC06B012CB3510/25-002X18AWG	Composite 12 Fiber OM1 with Two 18 AWG Stranded Conductors, Filled Loose Tube
☎ LTRC012ZB3515/55-002X12AWG	Composite 12 Fiber OM2 with Two 12 AWG Stranded Conductors, Dry Loose Tube
☎ OPRC012ZB3515/55-002X12AWG	Composite 12 Fiber OM2 with Two 12 AWG Stranded Conductors, Filled Loose Tube
☎ LTRC06B012ZB3515/55-002X18AWG	Composite 12 Fiber OM2 with Two 18 AWG Stranded Conductors, Dry Loose Tube
☎ OPRC06B012ZB3515/55-002X18AWG	Composite 12 Fiber OM2 with Two 18 AWG Stranded Conductors, Filled Loose Tube
☎ LTRC012LB3010/75-002X12AWG	Composite 12 Fiber OM2+ with Two 12 AWG Stranded Conductors, Dry Loose Tube
☎ OPRC012LB3010/75-002X12AWG	Composite 12 Fiber OM2+ with Two 12 AWG Stranded Conductors, Filled Loose Tube
☎ LTRC06B012LB3010/75-002X18AWG	Composite 12 Fiber OM2+ with Two 18 AWG Stranded Conductors, Dry Loose Tube
☎ OPRC06B012LB3010/75-002X18AWG	Composite 12 Fiber OM2+ with Two 18 AWG Stranded Conductors, Filled Loose Tube
☎ LTRC012AB0707-002X12AWG	Composite 12 Fiber OS1 with Two 12 AWG Stranded Conductors, Dry Loose Tube
☎ OPRC012AB0707-002X12AWG	Composite 12 Fiber OS1 with Two 12 AWG Stranded Conductors, Filled Loose Tube
☎ LTRC06B012AB0707-002X18AWG	Composite 12 Fiber OS1 with Two 18 AWG Stranded Conductors, Dry Loose Tube
☎ OPRC06B012AB0707-002X18AWG	Composite 12 Fiber OS1 with Two 18 AWG Stranded Conductors, Filled Loose Tube

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## CL3R-OF Composite Fiber Cable

Part Number	Description
☎ HDRC002CB3510/25-002X12AWG	Composite 2 Fiber OM1 with Two 12 AWG Stranded Conductors, Tight Buffer
☎ HDRC002CB3510/25-002X18AWG	Composite 2 Fiber OM1 with Two 18 AWG Stranded Conductors, Tight Buffer
☎ HDRC002ZB3515/55-002X12AWG	Composite 2 Fiber OM2 with Two 12 AWG Stranded Conductors, Tight Buffer
☎ HDRC002ZB3515/55-002X18AWG	Composite 2 Fiber OM2 with Two 18 AWG Stranded Conductors, Tight Buffer
☎ HDRC002LB3010/75-002X12AWG	Composite 2 Fiber OM2+ with Two 12 AWG Stranded Conductors, Tight Buffer
☎ HDRC002LB3010/75-002X18AWG	Composite 2 Fiber OM2+ with Two 18 AWG Stranded Conductors, Tight Buffer
☎ HDRC002AB0707-002X12AWG	Composite 2 Fiber OS1 with Two 12 AWG Stranded Conductors, Tight Buffer
☎ HDRC002AB0707-002X18AWG	Composite 2 Fiber OS1 with Two 18 AWG Stranded Conductors, Tight Buffer

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### Manufacturing Release

**IMPORTANT NOTICE:** This product specification is provided for informational purposes only in order to illustrate typical product constructions, applications and/or methods of installation. Because conditions of actual installation and use are unique and will vary, Berk-Tek makes no representation or warranty as to the reliability, accuracy or completeness of this data, even if Berk-Tek is aware of the product's intended use or purpose. Furthermore, this data does not constitute, nor should it be regarded or relied upon, as professional engineering advice. Installation of cable should only be done by qualified personnel and in conformance with all safety, electrical and other applicable codes, standards, rules or regulations. Appropriate and correct product selection, installation and use, and compliance with all such codes, standards, rules and regulations, is a customer/end-user responsibility. Product specifications, standards, programs or services are subject to improvement or changes without notice. Berk-Tek accepts no liability for typographical errors, technical inaccuracies, omissions or misuse of the information contained herein. Changes will be periodically made to address any such issues.