

# Berk-Tek Outside Plant Dry Loose Tube - Single Armor Single Jacket (LTAD-1A1J-M2)

Berk-Tek's Single Armor Single Jacket Outside Plant fiber optic cables are designed for installation in harsh environments such as direct burial, conduit and pathways that are subjected to wide temperature variations. The Armored Dry Loose Tube Outside Plant product is offered with 2 - 288 fibers per cable. These cables are thoroughly tested and verified to Telcordia GR-20 and ICEA-640 for outside cabling systems.

## DESCRIPTION

Berk-Tek's Outdoor Single Armor Single Jacket Dry Tube Jacket Loose Tube cables are available in multimode, single-mode and GIGAlite™ fibers.

### Buffer Tube Construction

Tubes contain water-blocking yarn and up to 12, 250 µm, individually colored fibers.

### Outdoor Consideration

Berk-Tek recommends that loose tube cables be utilized in an outside plant installation environment. Loose tube cables are especially recommended if the interbuilding conduit system is above the frost line and likely to fill with water.

### Applications

Berk-Tek's Outdoor Loose Tube fiber optic cable is intended for all high speed data applications, including:

- ETHERNET: 10BASE – 40GBASE (10BASE, 100BASE, 1000BASE, 10GBASE, 40GBASE, 100GBASE, 400GBASE)
- Fibre Channel: 1G-FC – 128GFC (1, 2, 4, 8, 16, 32, 128 GFC)
- SONET: OC-1 – OC-768 (OC -1, 3, 12, 24, 48, 192, 768)
- SDH: STM-0 – STM-256 (STM-0, 1, 4, 16, 64, 256)
- OTN: OTU-1 – OTU4 (OTU1, 2, 2e, 2f, 3, 3e2, 4)
- CPRI: CPRI-1 – CPRI-9 (CPRI-1, 2, 3, 4, 5, 6, 7, 7a, 8, 9)

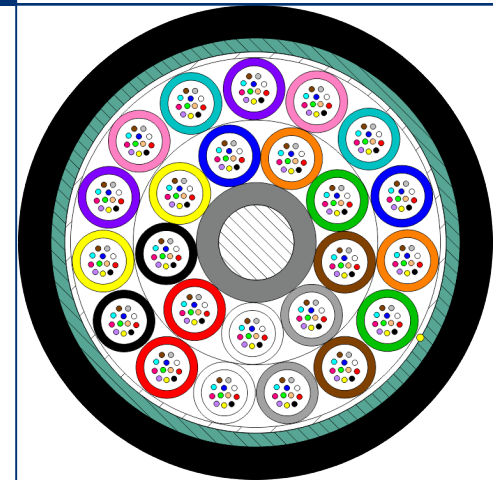
### Features

- High tensile strength, crush resistant and small diameter design.
- Single-mode, multimode and hybrid design options available.
- Corrugated steel armor provides crush and rodent resistance.
- Fully water-blocked core using dry water blocking system.

### Benefits

- Provides for greater pulling distances thus reducing installation time.
- Broad design selection allows for mix and match of fiber components to specific networking applications.
- Long-term reliability.
- Low cable plant maintenance, ease of installation.
- Reduce network costs.

**Country of Origin: U.S.A.**



## STANDARDS

**National ANSI/ICEA S-87-640;**  
ANSI/TIA-568.3-D;  
Telcordia GR-20

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TECHNICAL DATA - PHYSICAL						Install		Long Term		Install		Long Term	
Fibers	Part Number Prefix	Diameter		Weight		Min. Bend Radius				Max. Loading			
		in.	mm	lb./kft	kg/km	in.	cm	in.	cm	lbf.	N	lbf.	N
2	LTAD12B002-1A1J-M2	0.460	11.6	75	111	6.9	17.4	4.6	11.6	600	2660	180	890
4	LTAD12B004-1A1J-M2	0.460	11.6	75	111	6.9	17.4	4.6	11.6	600	2660	180	890
6	LTAD12B006-1A1J-M2	0.460	11.6	75	111	6.9	17.4	4.6	11.6	600	2700	180	800
8	LTAD12B008-1A1J-M2	0.460	11.6	75	111	6.9	17.4	4.6	11.6	600	2700	180	800
12	LTAD12B012-1A1J-M2	0.460	11.6	75	111	6.9	17.4	4.6	11.6	600	2700	180	800
24	LTAD12B024-1A1J-M2	0.460	11.6	75	111	6.9	17.4	4.6	11.6	600	2700	180	800
36	LTAD12B036-1A1J-M2	0.460	11.6	75	111	6.9	17.4	4.6	11.6	600	2700	180	800
48	LTAD12B048-1A1J-M2	0.460	11.6	75	111	6.9	17.4	4.6	11.6	600	2700	180	800
72	LTAD12B072-1A1J-M2	0.480	12.3	87	129	7.3	18.5	4.8	12.3	600	2700	180	800
96	LTAD12B096-1A1J-M2	0.550	14.0	105	157	8.3	21.0	5.5	14.0	600	2700	180	800
120	LTAD12B120-1A1J-M2	0.620	15.7	136	203	9.3	23.6	6.2	15.7	600	2700	180	800
144	LTAD12B144-1A1J-M2	0.690	17.6	163	243	10.4	26.4	6.9	17.6	600	2700	180	800
216	LTAD12B216-1A1J-M2	0.680	17.3	144	215	10.2	26.0	6.8	17.3	600	2700	180	800
240	LTAD12B240-1A1J-M2	0.710	18.1	161	239	10.7	27.2	7.1	18.1	600	2700	180	800
288	LTAD12B288-1A1J-M2	0.780	19.9	192	286	11.7	29.9	7.8	19.9	600	2700	180	800

TECHNICAL DATA										
Fiber Type	Part Number Suffix	Berk-Tek Fiber	Core Size	Wavelength (nm)	Maximum Attenuation (dB/km)	Effective Modal Bandwidth @ 850 nm (MHz·km)	Distance (meters)			
<b>Multimode - Bend Insensitive</b>							<b>1 GbE</b>	<b>10 GbE</b>	<b>40 GbE</b>	<b>100 GbE</b>
OM1	CB3510/25	GIGAlite	62.5 μm	850/1300	3.5/1.0	200	300	33	N/A	N/A
OM3	EB3010/25	GIGAlite-10	50 μm	850/1300	3.0/1.0	2000	1000	300	100	70
OM4	FB3010/F5	GIGAlite-10FB	50 μm	850/1300	3.0/1.0	4700	1040	550	150	100
OM4+	XB3010/X5	GIGAlite-10XB	50 μm	850/1300	3.0/1.0	4900	1210	600	300	150
<b>WideBand Multimode - Bend Insensitive</b>							<b>1 GbE</b>	<b>10 GbE</b>	<b>40 GbE</b>	<b>100 GbE</b>
OM5	WB3010/W5	GIGAlite-10WB	50 μm	850-953/1300	3.0/1.0	4700	1040	550	190	100
<b>Single-Mode - Bend Insensitive - ITU-T G.657.A1</b>							<b>1 GbE</b>	<b>10 GbE</b>	<b>40 GbE</b>	<b>100 GbE</b>
OS2	AB0302	Standard for Loose Tube	SMF	1310/1550	0.3/0.2	N/A	≥ 5000	≥ 10000	≥ 10000	≥ 10000

## CHARACTERISTICS

### Construction characteristics

Jacket Material	Polyethylene
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### Usage characteristics

RoHS compliant	Yes
Recommended operating temperature range	-60 .. 70 °C
Ambient installation temperature, range	-30 .. 60 °C
Recommended storage temperature range	-40 .. 75 °C

## SHEATH COLORS

Fiber Type	Core Size (um)	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	8.3	OS2	NS	NS	NS	0.3 dB/km	0.2 dB/km	Black
AB	8.3	OS2	NS	NS	NS	0.4 dB/km	0.3 dB/km	Black
CB	62.5	OM1	200 MHz-km	200 MHz-km	3.5 dB/km	1.0 dB/km	NS	Black
EB	50	OM3	2000 MHz-km	1500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
FB	50	OM4	4700 MHz-km	3500 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black
XB	50	OM4+	4900 MHz-km	3675 MHz-km	3.0 dB/km	1.0 dB/km	NS	Black

NS = Not Specified

## MANUFACTURING RELEASE

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