

Blue Tiger® Jumpers

A Robust Solution for High Speed and DWDM Networks



Features and Benefits

- Ultra low-loss solution for longer reaches and improved network performance resulting in reduced operational and re-transmit costs
- Superior performance in the C- and L-bands as a direct result of lower bend losses in the fiber in the 1530 to 1625 nm regions
- Visual color identification for high speed paths with its distinctive blue jumper outer jacket

- Fully compatible with Non-zero Dispersion Fiber (NZDF) and all single-mode fiber systems
- Meets or exceeds all industry standards for single-mode fiber performance
- Available with standard polish and angled polish connectors
- Combines full spectrum low loss performance with very low bending loss

Applications

- High speed optical paths in central offices, point-of-presence locations (POPs) or equipment buildings
- High-performance optical networks operating in the C- and L-band spectrums
- Service providers' high-performance DWDM traffic systems or digital video systems
- Service providers' networks carrying high traffic on a single fiber (> OC-48)
- Optical networks with multiple "pass through" nodes

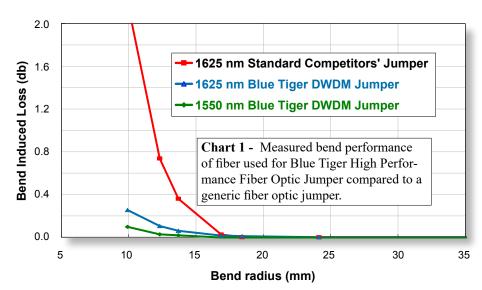
Product Description

Today's demanding networks require connectivity solutions which provide superior optical performance as well as robust designs. The Blue Tiger Jumper offers the flexibility and convenience of connector-based connectivity with the low loss performance typically only found in fusion-spliced solutions. With a 0.15 dB maximum insertion loss for LC and SC connections, Blue Tiger Jumpers provides superior optical performance for today's high speed networks.

DWDM, SONET, SDH and Cable TV optical transport systems are evolving to take full advantage of the extended optical spectrum in the 1530-1565 nm and the 1565-1625 nm region, i.e., the C-band and the L-band. Susceptibility to bend-induced losses in these two bands, versus the 1310 nm region, creates a challenge in areas where the handling and routing of fiber paths is necessary - such as at fiber distribution locations. High bend losses can increase bit error rates, forcing optical transport systems to retransmit entire data streams. Made with specially selected (Enhanced) AllWave[®] *FLEX* ZWP Fiber, Blue Tiger jumpers can withstand bending radiuses as tight as 10 mm and are rated to withstand bends as tight as 15 mm over a 25 year period. Blue Tiger Jumpers also minimize heat generated by the combination of high power transmission and fiber bends, preventing premature fiber coating failure and burning of cordage materials. OFS offers a specially designed jumper - the Blue Tiger - for superior performance in the C- and L-bands of the optical spectrum.



Chart 1 shows that the measured loss at 1625 and 1550 nm is well below Telcordia's (formerly Bellcore) specific limit of 0.5 dB for 1 turn with a 16 mm radius at a wavelength of 1550 nm. The loss at 1625 nm is also well below this limit, even for bends with a radius as tight as 10 mm.



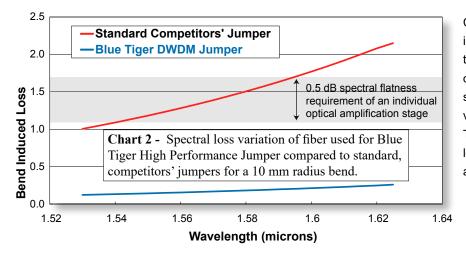


Chart 2 illustrates the spectral variation of the bendinduced loss over the wavelength band for DWDM transmission in the C- and L-bands of erbiumdoped fiber amplifiers (EDFAs). As the chart shows, standard competitors' jumpers have significant loss variation over the DWDM bands, while the Blue Tiger High Performance Jumpers have minimal loss variation, even for a bend radius as small as a 10 mm.

Blue Tiger LC and SC Jumper Specifications (Single-Mode 1310 and 1550*)					
Loss ¹ (Max)	0.15 dB				
Return Loss (Minimum)	55 dB				
Cable OD	1.6 mm, 2.0 mm				
Cable Retention ² (cordage)	20 lbs./88.9 N				
Mating Durability for 500 Reconnects Insertion Loss Change	< 0.2 dB				
Temperature Stability (–40 °C to +75 °C) Insertion Loss Change	< 0.3 dB				
Tip Material	Ceramic				

* 0.15 dB Maximum insertion loss for LCU, LC4 and SCU jumpers

0.5 dB Maximum insertion loss for LCA and SCA jumpers

¹ Complete connection concatenated statistics 8.3/125 µm fiber, dry connection

² Cable dependent to cause permanent light transmission failure. Figures representative of use with OFS jumper cordage



Fiber Count

002 = Duplex Zip

001 = Simplex

LCF = LC Ultra Polish Soft Boot (900um Only) **LCD** = LC Ultra Polish Single Mode Duplex w/ Clip

SCF = SC Ultra Polish Soft Boot (900um Only)

FCA = FC Angle Polish (Single Mode Only)

SAS = SC Angle Polish Short Boot (1.6mm & 2.0mm Single Mode Only)

SCS = SC Ultra Polish Short Boot (1.6mm & 2.0mm Only)

UNC = UNConnectorized (Stub, Pigtail) (End "B" only)

STP = STII+ Ultra Polish Pool Proof (Use with RISER & LSZH) **ST2** = STII Ultra Polish (Use with PLENUM Cordage)

SCA = SC Angle Polish (Single Mode Only)

SCU = SC Ultra Polish

FCU = FC Ultra Polish

C = Centimeters (Min. 15 cm simplex/45 cm duplex)

I = Inches (Min. 6 in. simplex/18 in. duplex)

lumper Assemblies SMART Coding

Jumper Assemblies OMP						
Examples: JR1BB001LCUSCU003M – JR2BB002LCUSCU003M – JR9BB001LCUUNC003M –	Jumper Riser 2.	.0 mm Blue	e Tiger Blue 2 fil	bers (Zip) LCU S	CU SCU 003 Meters long SCU 003 Meters long Pigtail) 003 Meters long	
SMART Code syntax below has spaces between field sets for visibility. Actual SMART Code should not include any spacing.						
Cable Design JR1 = Riser 1.6 mm JR2 = Riser 2.0 mm JR9 = PVC Riser 900 µm (Simplex	<u>XXX</u> X 2 (Only)			<u>xxx</u> <u>x</u> - <i>Length</i> 001 - 999	 Unit Of Measure M = Meters (Min. 1 m) C = Centimeters (Min. 15 f) F = Feet (Min. 1 ft) I = Inches (Min. 6 in. simplify) 	
Fiber Type			LCA = LC Ang $LA4 = LC Ang$ $LC4 = LC Ultr$	a Polish 40 Degre	Mode Only) ree Boot (Single Mode Only)	
<i>Jacket Color</i> ◀ B = Blue (Blue Tiger)					ot (1.6mm & 2.0mm Only)	

For additional information please contact your sales representative. You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.



004 = Quad Round Cable (1.6 mm Sub Units Riser Only)



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