NEW! Keyed LC Opti-Core® Patch Cords and Pigtails – Riser (OFNR) and Plenum (OFNP) Rated

PANDUIT®

SPECIFICATION SHEET

specifications

Keyed LC fiber optic patch cords shall include simplex or duplex keyed LC connectors on both ends, or on one end with non-keyed LC or SC connectors on the other end. Keyed LC fiber optic pigtails shall include simplex or duplex keyed LC connectors on one end and open (unterminated) on the other end. Keyed LC connectors shall be mechanically keyed with color-specific positive and negative keying features to prevent unintentional mating with unlike keyed or non-keyed adapters. Patch cords and pigtails shall include laser optimized OM3 fiber, OM2, OM1 and OS1/OS2 fiber inside 900µm tight-buffered fiber or 1.6mm simplex or duplex zip-cord jacketed cable. Jacketed cable shall be compliant with UL1666 (OFNR) or NFPA 262 (OFNP) flame ratings. Patch cords and pigtails shall be RoHS compliant and shall meet or exceed requirements of TIA/EIA-568-B.3. The fiber connectors shall exceed the requirements of TIA/EIA-455-21A for 500 mating cycles.

technical information

Standards requirements

Fiber optic connectors:	Exceed TIA/EIA-568-B.3 performance requirements Exceed TIA/EIA-455-21A: 500 mating cycles
Patch cords and pigtails:	Compliant with TIA/EIA-568-B.3, IEC-61754-7 (International), and UL1666 (OFNR) or NFPA 262 (OFNP) flame ratings
Insertion loss:	Per connection: 0.10dB typical, 0.30dB max. (multimode); 0.25dB typical, 0.35dB max. (LC singlemode), 0.25dB typical, 0.75dB max. (SC singlemode)
Return loss:	20dB min. (multimode); 26dB min. (10Gig™ multimode); 55dB min. (singlemode)

key features and benefits

Color-specific keys with positive and negative keying features	Mechanically and visually distinguish connections to prevent unintentional insertion into unlike keyed or non-keyed ports, allow network design flexibility and versatility, and accommodate more discrete networks
Factory terminated and 100% tested for insertion loss (all) and return loss (10Gig™ and SM)	Assures high performance for increased up-time and lower cost of ownership
Riser or plenum rated jacket	Meets UL1666 (OFNR) or NFPA 262 (OFNP) flame ratings for standard compliant safety
Singlemode endfaces UPC polished (55dB min. return loss)	Ensure a high quality endface for higher return loss to meet application requirements
Singlemode endface geometry 100% factory inspected	Every singlemode endface is inspected in compliance with Telcordia GR-326-CORE, Issue 3 requirements to assure high performance
Certified 10 GbE performance	Keyed LC 10Gig™ Patch Cords and Pigtails are tested per IEEE 802.3ae 10 GbE to support network transmission speeds up to 10 Gb/s for link lengths up to 300 meters at 850nm to assure high performance and reliability
Test data supplied with each patch cord and pigtail	Establishes a performance reference to streamline maintenance and troubleshooting
Universal reference cords	Facilitate network testing and troubleshooting for simplified link validation (eliminates the need for multiple key-specific reference cords)

applications

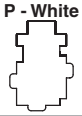
Keyed LC Opti-Core® Fiber Optic Patch Cords and Pigtails enable fiber to the desk (FTTD), interconnect and cross-connect of applications for the specialized infrastructure design that is required for secure networks. The primary application for Keyed LC Opti-Core® Fiber Optic Patch Cords and Pigtails is FTTD deployments that require a level of visual and mechanical differentiation, and physical layer security that conventional connector solutions cannot provide.

These riser (OFNR) and plenum (OFNP) rated patch cords and pigtails support installations that require flame ratings in specific environments. Keyed LC Opti-Core® Fiber Optic Patch Cords and Pigtails are available in OM1, OM2, OM3 and OS1/OS2 fiber types to meet the demands of Gigabit Ethernet, 10 Gigabit Ethernet and high speed Fibre Channel systems while maintaining compatibility with Ethernet, Fast Ethernet, FDDI and ATM.

Keyed LC Opti-Core® Duplex OFNR Patch Cords (Keyed LC to Keyed LC)	
Keyed A (black):	F^E10A-10AM‡
Keyed B (red):	F^E10B-10BM‡
Keyed C (green):	F^E10C-10CM‡
Keyed D (yellow):	F^E10D-10DM‡
Keyed E (orange):	F^E10E-10EM‡
Keyed F (dark blue):	F^E10F-10FM‡
Keyed LC Opti-Core® Simplex Pigtails – 900µm Buffered Fiber*	
Keyed A (black):	F^B10A-NM‡
Keyed B (red):	F^B10B-NM‡
Keyed C (green):	F^B10C-NM‡
Keyed D (yellow):	F^B10D-NM‡
Keyed E (orange):	F^B10E-NM‡
Keyed F (dark blue):	F^B10F-NM‡
Keyed LC Opti-Core® Duplex OFNP Pigtails – 1.6mm Jacketed Cable*	
Keyed A (black):	F^PE10A-NM‡
Keyed B (red):	F^PE10B-NM‡
Keyed C (green):	F^PE10C-NM‡
Keyed D (yellow):	F^PE10D-NM‡
Keyed E (orange):	F^PE10E-NM‡
Keyed F (dark blue):	F^PE10F-NM‡
Keyed LC Opti-Core® Hybrid Duplex OFNR Patch Cords (Keyed LC to LC)	
Keyed A (black):	F^E10A-10M‡
Keyed B (red):	F^E10B-10M‡
Keyed C (green):	F^E10C-10M‡
Keyed D (yellow):	F^E10D-10M‡
Keyed E (orange):	F^E10E-10M‡
Keyed F (dark blue):	F^E10F-10M‡
Keyed LC Opti-Core® Hybrid Duplex OFNR Patch Cords (SC to Keyed LC)	
Keyed A (black):	F^E3-10AM‡
Keyed B (red):	F^E3-10BM‡
Keyed C (green):	F^E3-10CM‡
Keyed D (yellow):	F^E3-10DM‡
Keyed E (orange):	F^E3-10EM‡
Keyed F (dark blue):	F^E3-10FM‡
Keyed LC Mini-Com® Duplex Adapter Modules (Ceramic Split Sleeves)	
Keyed A (black):	CMDABLLCZ**
Keyed B (red):	CMDBRDLCZ**
Keyed C (green):	CMDCGRLCZ**
Keyed D (yellow):	CMDDYLLCZ**
Keyed E (orange):	CMDEORLCZ**
Keyed F (dark blue):	CMDFDBLCZ**
Keyed LC Opticom® Fiber Adapter Panels (Ceramic Split Sleeves)	
Keyed A (black):	FAP6WABLDLCZ
Keyed B (red):	FAP6WBRDDLCZ
Keyed C (green):	FAP6WCGRDLCZ
Keyed D (yellow):	FAP6WDYLDLCZ
Keyed E (orange):	FAP6WEORDLCZ
Keyed F (dark blue):	FAP6WFDBDLCZ
LC Lock-in Duplex Clip and Duplex Adapter Blockout Device	
LC lock-in duplex clip:	FLCCLIW-X
LC duplex adapter blockout device	PSL-LCAB

Includes 6 duplex adapters; replace 6 in part numbers with 8 or 12 for 8 or 12 adapters.
^Substitute for fiber type: 6 = 62.5/125µm OM1, 5 = 50/125µm OM2, X = 10Gig™ 50/125µm OM3 or 9 = 9/125µm OS1/OS2.
‡Substitute for length in meters: 1 – 10, 15, 20 or 30. Contact Customer Service for other available lengths or universal reference patch cords.
*900µm buffered fiber pigtails are not flame rated; jacketed pigtails listed are plenum (OFNP) rated.
**Substitute for module color: AW for Arctic White, BL for Black, BU for Blue, EI for Electric Ivory, or IW for Off White.
12 new additional colors available on back of spec sheet

ordering information

Key Type and Color (Adapter Key Shown)	Fiber Type	Keyed LC to Keyed LC Duplex OFNR Patch Cords	Keyed LC Simplex Pigtails	Keyed LC Duplex OFNP Pigtails	Keyed LC to LC Duplex OFNR Patch Cords	Keyed LC to SC Duplex OFNR Patch Cords
A - Black 	10Gig™ 50/125µm OM3	FXE10A-10AM*	FXB10A-NM*	FXPE10A-NM*	FXE10A-10M*	FXE3-10AM*
	50/125µm OM2	F5E10A-10AM*	F5B10A-NM*	F5PE10A-NM*	F5E10A-10M*	F5E3-10AM*
	62.5/125µm OM1	F6E10A-10AM*	F6B10A-NM*	F6PE10A-NM*	F6E10A-10M*	F6E3-10AM*
	9/125µm OS1/OS2	F9E10A-10AM*	F9B10A-NM*	F9PE10A-NM*	F9E10A-10M*	F9E3-10AM*
B - Red 	10Gig™ 50/125µm OM3	FXE10B-10BM*	FXB10B-NM*	FXPE10B-NM*	FXE10B-10M*	FXE3-10BM*
	50/125µm OM2	F5E10B-10BM*	F5B10B-NM*	F5PE10B-NM*	F5E10B-10M*	F5E3-10BM*
	62.5/125µm OM1	F6E10B-10BM*	F6B10B-NM*	F6PE10B-NM*	F6E10B-10M*	F6E3-10BM*
	9/125µm OS1/OS2	F9E10B-10BM*	F9B10B-NM*	F9PE10B-NM*	F9E10B-10M*	F9E3-10BM*
C - Green 	10Gig™ 50/125µm OM3	FXE10C-10CM*	FXB10C-NM*	FXPE10C-NM*	FXE10C-10M*	FXE3-10CM*
	50/125µm OM2	F5E10C-10CM*	F5B10C-NM*	F5PE10C-NM*	F5E10C-10M*	F5E3-10CM*
	62.5/125µm OM1	F6E10C-10CM*	F6B10C-NM*	F6PE10C-NM*	F6E10C-10M*	F6E3-10CM*
	9/125µm OS1/OS2	F9E10C-10CM*	F9B10C-NM*	F9PE10C-NM*	F9E10C-10M*	F9E3-10CM*
D - Yellow 	10Gig™ 50/125µm OM3	FXE10D-10DM*	FXB10D-NM*	FXPE10D-NM*	FXE10D-10M*	FXE3-10DM*
	50/125µm OM2	F5E10D-10DM*	F5B10D-NM*	F5PE10D-NM*	F5E10D-10M*	F5E3-10DM*
	62.5/125µm OM1	F6E10D-10DM*	F6B10D-NM*	F6PE10D-NM*	F6E10D-10M*	F6E3-10DM*
	9/125µm OS1/OS2	F9E10D-10DM*	F9B10D-NM*	F9PE10D-NM*	F9E10D-10M*	F9E3-10DM*
E - Orange 	10Gig™ 50/125µm OM3	FXE10E-10EM*	FXB10E-NM*	FXPE10E-NM*	FXE10E-10M*	FXE3-10EM*
	50/125µm OM2	F5E10E-10EM*	F5B10E-NM*	F5PE10E-NM*	F5E10E-10M*	F5E3-10EM*
	62.5/125µm OM1	F6E10E-10EM*	F6B10E-NM*	F6PE10E-NM*	F6E10E-10M*	F6E3-10EM*
	9/125µm OS1/OS2	F9E10E-10EM*	F9B10E-NM*	F9PE10E-NM*	F9E10E-10M*	F9E3-10EM*
F - Dark Blue 	10Gig™ 50/125µm OM3	FXE10F-10FM*	FXB10F-NM*	FXPE10F-NM*	FXE10F-10M*	FXE3-10FM*
	50/125µm OM2	F5E10F-10FM*	F5B10F-NM*	F5PE10F-NM*	F5E10F-10M*	F5E3-10FM*
	62.5/125µm OM1	F6E10F-10FM*	F6B10F-NM*	F6PE10F-NM*	F6E10F-10M*	F6E3-10FM*
	9/125µm OS1/OS2	F9E10F-10FM*	F9B10F-NM*	F9PE10F-NM*	F9E10F-10M*	F9E3-10FM*
G - Violet 	10Gig™ 50/125µm OM3	FXE10G-10GM*	FXB10G-NM*	FXE10G-NM*	FXE10G-10M*	FXE3-10GM*
	50/125µm OM2	F5E10G-10GM*	F5B10G-NM*	F5E10G-NM*	F5E10G-10M*	F5E3-10GM*
	62.5/125µm OM1	F6E10G-10GM*	F6B10G-NM*	F6E10G-NM*	F6E10G-10M*	F6E3-10GM*
	9/125µm OS1/OS2	F9E10G-10GM*	F9B10G-NM*	F9E10G-NM*	F9E10G-10M*	F9E3-10GM*
H - Aqua 	10Gig™ 50/125µm OM3	FXE10H-10HM*	FXB10H-NM*	FXE10H-NM*	FXE10H-10M*	FXE3-10HM*
	50/125µm OM2	F5E10H-10HM*	F5B10H-NM*	F5E10H-NM*	F5E10H-10M*	F5E3-10HM*
	62.5/125µm OM1	F6E10H-10HM*	F6B10H-NM*	F6E10H-NM*	F6E10H-10M*	F6E3-10HM*
	9/125µm OS1/OS2	F9E10H-10HM*	F9B10H-NM*	F9E10H-NM*	F9E10H-10M*	F9E3-10HM*
J - Rose 	10Gig™ 50/125µm OM3	FXE10J-10JM*	FXB10J-NM*	FXE10J-NM*	FXE10J-10M*	FXE3-10JM*
	50/125µm OM2	F5E10J-10JM*	F5B10J-NM*	F5E10J-NM*	F5E10J-10M*	F5E3-10JM*
	62.5/125µm OM1	F6E10J-10JM*	F6B10J-NM*	F6E10J-NM*	F6E10J-10M*	F6E3-10JM*
	9/125µm OS1/OS2	F9E10J-10JM*	F9B10J-NM*	F9E10J-NM*	F9E10J-10M*	F9E3-10JM*
K - Slate 	10Gig™ 50/125µm OM3	FXE10K-10KM*	FXB10K-NM*	FXE10K-NM*	FXE10K-10M*	FXE3-10KM*
	50/125µm OM2	F5E10K-10KM*	F5B10K-NM*	F5E10K-NM*	F5E10K-10M*	F5E3-10KM*
	62.5/125µm OM1	F6E10K-10KM*	F6B10K-NM*	F6E10K-NM*	F6E10K-10M*	F6E3-10KM*
	9/125µm OS1/OS2	F9E10K-10KM*	F9B10K-NM*	F9E10K-NM*	F9E10K-10M*	F9E3-10KM*
L - Brown 	10Gig™ 50/125µm OM3	FXE10L-10LM*	FXB10L-NM*	FXE10L-NM*	FXE10L-10M*	FXE3-10LM*
	50/125µm OM2	F5E10L-10LM*	F5B10L-NM*	F5E10L-NM*	F5E10L-10M*	F5E3-10LM*
	62.5/125µm OM1	F6E10L-10LM*	F6B10L-NM*	F6E10L-NM*	F6E10L-10M*	F6E3-10LM*
	9/125µm OS1/OS2	F9E10L-10LM*	F9B10L-NM*	F9E10L-NM*	F9E10L-10M*	F9E3-10LM*
P - White 	10Gig™ 50/125µm OM3	FXE10P-10PM*	FXB10P-NM*	FXE10P-NM*	FXE10P-10M*	FXE3-10PM*
	50/125µm OM2	F5E10P-10PM*	F5B10P-NM*	F5E10P-NM*	F5E10P-10M*	F5E3-10PM*
	62.5/125µm OM1	F6E10P-10PM*	F6B10P-NM*	F6E10P-NM*	F6E10P-10M*	F6E3-10PM*
	9/125µm OS1/OS2	F9E10P-10PM*	F9B10P-NM*	F9E10P-NM*	F9E10P-10M*	F9E3-10PM*
Q - Charcoal 	10Gig™ 50/125µm OM3	FXE10Q-10QM*	FXB10Q-NM*	FXE10Q-NM*	FXE10Q-10M*	FXE3-10QM*
	50/125µm OM2	F5E10Q-10QM*	F5B10Q-NM*	F5E10Q-NM*	F5E10Q-10M*	F5E3-10QM*
	62.5/125µm OM1	F6E10Q-10QM*	F6B10Q-NM*	F6E10Q-NM*	F6E10Q-10M*	F6E3-10QM*
	9/125µm OS1/OS2	F9E10Q-10QM*	F9B10Q-NM*	F9E10Q-NM*	F9E10Q-10M*	F9E3-10QM*
R - Lavender 	10Gig™ 50/125µm OM3	FXE10R-10RM*	FXB10R-NM*	FXE10R-NM*	FXE10R-10M*	FXE3-10RM*
	50/125µm OM2	F5E10R-10RM*	F5B10R-NM*	F5E10R-NM*	F5E10R-10M*	F5E3-10RM*
	62.5/125µm OM1	F6E10R-10RM*	F6B10R-NM*	F6E10R-NM*	F6E10R-10M*	F6E3-10RM*
	9/125µm OS1/OS2	F9E10R-10RM*	F9B10R-NM*	F9E10R-NM*	F9E10R-10M*	F9E3-10RM*

ordering information

Key Type and Color (Adapter Key Shown)	Fiber Type	Keyed LC to Keyed LC Duplex OFNR Patch Cords	Keyed LC Simplex Pigtails	Keyed LC Duplex OFNP Pigtails	Keyed LC to LC Duplex OFNR Patch Cords	Keyed LC to SC Duplex OFNR Patch Cords
S - Peach	10Gig™ 50/125µm OM3	FXE10S-10SM*	FXB10S-NM*	FXE10S-NM*	FXE10S-10M*	FXE3-10SM*
	50/125µm OM2	F5E10S-10SM*	F5B10S-NM*	F5E10S-NM*	F5E10S-10M*	F5E3-10SM*
	62.5/125µm OM1	F6E10S-10SM*	F6B10S-NM*	F6E10S-NM*	F6E10S-10M*	F6E3-10SM*
	9/125µm OS1/OS2	F9E10S-10SM*	F9B10S-NM*	F9E10S-NM*	F9E10S-10M*	F9E3-10SM*
T - Steel Blue	10Gig™ 50/125µm OM3	FXE10T-10TM*	FXB10T-NM*	FXE10T-NM*	FXE10T-10M*	FXE3-10TM*
	50/125µm OM2	F5E10T-10TM*	F5B10T-NM*	F5E10T-NM*	F5E10T-10M*	F5E3-10TM*
	62.5/125µm OM1	F6E10T-10TM*	F6B10T-NM*	F6E10T-NM*	F6E10T-10M*	F6E3-10TM*
	9/125µm OS1/OS2	F9E10T-10TM*	F9B10T-NM*	F9E10T-NM*	F9E10T-10M*	F9E3-10TM*
V - Maroon	10Gig™ 50/125µm OM3	FXE10V-10VM*	FXB10V-NM*	FXE10V-NM*	FXE10V-10M*	FXE3-10VM*
	50/125µm OM2	F5E10V-10VM*	F5B10V-NM*	F5E10V-NM*	F5E10V-10M*	F5E3-10VM*
	62.5/125µm OM1	F6E10V-10VM*	F6B10V-NM*	F6E10V-NM*	F6E10V-10M*	F6E3-10VM*
	9/125µm OS1/OS2	F9E10V-10VM*	F9B10V-NM*	F9E10V-NM*	F9E10V-10M*	F9E3-10VM*
W - Mint	10Gig™ 50/125µm OM3	FXE10W-10WM*	FXB10W-NM*	FXE10W-NM*	FXE10W-10M*	FXE3-10WM*
	50/125µm OM2	F5E10W-10WM*	F5B10W-NM*	F5E10W-NM*	F5E10W-10M*	F5E3-10WM*
	62.5/125µm OM1	F6E10W-10WM*	F6B10W-NM*	F6E10W-NM*	F6E10W-10M*	F6E3-10WM*
	9/125µm OS1/OS2	F9E10W-10WM*	F9B10W-NM*	F9E10W-NM*	F9E10W-10M*	F9E3-10WM*

*Substitute for length in meters: 1 – 10, 15, 20 or 30.
Standard cable jacket colors are: Aqua – OM3, Orange – OM2/OM1, Yellow – OS2/OS1. Custom colors available upon request. Contact factory.
For OFNP (Plenum) rated patch cords, add "P" to the part number. Ex: FX**P**E10GNM*. Plenum available in pigtails only.
Fiber type: 6 = 62.5/125µm OM1, 5 = 50/125µm OM2, X = 10Gig™ 50/125µm OM3 or 9 = 9/125µm OS1/OS2.

Keyed LC Mini-Com® Fiber Optic Adapter Modules

CMD*LCZIW

Keyed LC Opticom® Fiber Adapter Panels (FAPs)

FAP6W*DLCZ

Keyed LC OptiCam® Pre-Polished Fiber Connectors

FLCSMC^*

LC Lock-In Duplex Clip

FLCCLIW-X

LC Blockout Adapter Blockout Device

PSL-LCAB*

*For other colors, add AQ (Aqua), BL (Black), BU (Blue), or EI (Electric Ivory).
***Substitute for key type and color: ABL for A – Black, BRD for B – Red, CGR for C – Green, DYL for D – Yellow, EOR for E – Orange, or FDB for F – Dark Blue, GVL for G – Violet, HAQ for H – Aqua, JRO for J – Rose, KIG for K – Slate, LLB for L – Brown, PWT for P – White, QCG for Q – Charcoal, RLV for R – Lavender, SPE for S – Peach, TSB for T – Steel Blue, VMA for V – Maroon, WMI for W – Mint.

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OCEAN CHIPS
Океан Электроники
Поставка электронных компонентов

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».

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