

FUTURE READY SOLUTIONS® FIBER OPTIC REFERENCE GUIDE



	OM1	OM2	OM3	OM4	OM5	OS1	OS2
FIBER TYPE	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE	SINGLE MODE	SINGLE MODE
TYPICAL COLOR	ORANGE	ORANGE	AQUA	AQUA OR PURPLE	LIME GREEN	YELLOW	YELLOW
OPTICAL CORE SIZE	62.5µm	50µm	50µm	50µm	50µm	9µm	9µm
TYPICAL JACKET MARKING	62.5/125 OM1	50/125 OM2	50/125 OM3	50/125 OM4	50/125 OM5	9/125 OS1	9/125 OS2
COMPATIBILITY		OM3 OM4 OM5	OM2 OM4 OM5	OM2 OM3 OM5	OM2 OM3 OM4	OS2	OS1
LASER OPTIMIZED			■	■	■	■	■
1 GBPS MAX LINK LENGTH	220M 721FT	275M 902FT	550M 1804FT	550M 1804FT	550M 1804FT	10KM 6 MILES +	10KM 6 MILES +
10 GBPS MAX LINK LENGTH	33M 108FT	82M 269FT	300M 984FT	400M 1312FT	400M 1312FT	10KM 6 MILES +	10KM 6 MILES +
25 GBPS MAX LINK LENGTH			70M 230FT	100M 330FT	100M 330FT	10KM 6 MILES +	10KM 6 MILES +

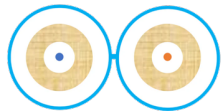
TYPICAL APPLICATIONS

AV & USB EXTENDERS*			■	■			■
BROADBAND INTERNET							■
BUILDING NETWORKING			■	■			■
BUILDING PREWIRE			■	■			■
BUILDING TO BUILDING				■			■

*Always consult the manufacturer specifications before choosing a cable type. Extenders are often specific to multimode or single mode fiber.



SIMPLEX
1 STRAND



DUPLEX
2 STRANDS



DISTRIBUTION
2+ STRANDS



AIA ARMORED INDOOR
1+ STRANDS



RUGGEDIZED OUTDOOR
1+ STRANDS



ARMORED DIRECT BURIAL
1+ STRANDS



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	SC	LC	ST	FC	MPO
COUPLING FORMAT	SNAP-ON	SNAP-ON	TWIST-ON	SCREW-ON	PUSH-PULL
STRANDS PER CONNECTOR	1	1	1	1	UP TO 24
MULTIMODE COMPATIBLE	■	■	■	■	■
SINGLE MODE COMPATIBLE	■	■	■	■	■
TYPICAL APPLICATIONS	BROADBAND INTERNET OLDER ELECTRONICS AV EXTENDERS PATCH PANELS	MODERN ELECTRONICS TRANSCEIVERS AV EXTENDERS PATCH PANELS	OLDER ELECTRONICS OLDER PATCH PANELS	BROADCAST ELECTRONICS	HIGH-DENSITY DATA CENTERS
TYPICAL COLOR CODES	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE
	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE
	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE
	SINGLE MODE UPC	SINGLE MODE UPC	SINGLE MODE UPC	SINGLE MODE UPC	SINGLE MODE UPC
	SINGLE MODE APC	SINGLE MODE APC	SINGLE MODE APC	SINGLE MODE APC	SINGLE MODE APC



ANGLED (APC) CONNECTORS

APC connectors are typically dark green and feature an 8° angled end face. The angled construction provides less overall loss and is ideal for outside plant, demarcation wiring, internet broadband and other high optical wavelength applications.

Before the modem, use APC connectors.
After the modem, use UPC connectors.

TROUBLESHOOTING CONNECTIONS

Check connection polarity. If using a duplex connection (two strands), swap the connections. Most fiber signals rely on separate transmit and receive paths.

Check your connectors. Is a connector loose? Often re-terminating solves the issue.

Check your connections. Is a connection or patch point loose or dirty? How many inline connections are in the run? Too many connections can cause too much signal loss.

Clean your connections. Remove dirt, dust and oil from fingerprints with pen-style cleaners or alcohol wipes.

Check for breaks. Identify cable damage using a VFL or OTDR cable tester. When identified, re-splice the cable.

Check your cable distance. Multimode fiber has a typical maximum distance of 300m / 1000 feet. Longer runs require single mode fiber.

Check compatibility. Some devices, especially AV over fiber extenders, are specific to either multimode or single mode fiber. Ensure the installed cable matches the device requirements.



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