



Setting the Standards

## Fiber Optic Hybrid Adapter



<p><b>Description</b></p>	<p>Oxin fiber optic hybrid adapters allow users to interconnect fiber optic cable assemblies featuring different interfaces' types and/or genders. Their precise alignment mechanisms provide flawless contact between connectors' end face. Mating sleeves and ferrules are manufactured with phosphorus bronze or zirconia ceramic, depending on network requirements, to uphold the level of desired performance. Zirconia ceramic sleeves are recommended for multimode OM3 and OM4 performance, and single mode OS1 or OS2. In the case of hybrid adapters with a male gender, the ferrule is made with zirconia ceramic by default.</p>																	
<p><b>Features and Benefits</b></p>	<ol style="list-style-type: none"> <li>1. Low insertion loss to minimize impact of loss budgets</li> <li>2. Precise alignment for a reliable glass-to-glass contact</li> <li>3. High repeatability to ensure durable multi-mating applications</li> <li>4. Manufactured with high performance component materials</li> </ol>																	
<p><b>Applications</b></p>	<ul style="list-style-type: none"> <li>• Data center</li> <li>• Fiber-to-the-home (FTTH)</li> <li>• Test facilities and instruments</li> <li>• Central office</li> <li>• Cellular tower base station Telecommunications room Equipment room</li> <li>• Consolidation point</li> </ul>																	
<p><b>Certification and Compliance</b></p>	<table border="1"> <tr> <td>GR-326-CORE</td> <td>Generic Requirements for Single Mode Optical Connectors and Jumper</td> </tr> <tr> <td>ANSI/TIA-568-C.3</td> <td>Optical Fiber Cabling Components Standard</td> </tr> <tr> <td>TIA-604 series</td> <td>Fiber Optic Connector Intermateability Standard</td> </tr> <tr> <td>TIA-455 series</td> <td>Standard Test Procedure for Fiber Optic Components</td> </tr> <tr> <td>IEC 60874-1</td> <td>Connectors for Optical Fibers and Cables, Generic Standard</td> </tr> <tr> <td>IEC 61300 series</td> <td>Fiber Optic Interconnecting Devices and Passive Components, Basic Test and Measurement Procedures</td> </tr> <tr> <td>UL 94</td> <td>Tests for Flammability of Plastic Material for Parts in Devices and Appliances</td> </tr> <tr> <td>RoHS</td> <td>Directive on Restriction of Hazardous Substances</td> </tr> </table>	GR-326-CORE	Generic Requirements for Single Mode Optical Connectors and Jumper	ANSI/TIA-568-C.3	Optical Fiber Cabling Components Standard	TIA-604 series	Fiber Optic Connector Intermateability Standard	TIA-455 series	Standard Test Procedure for Fiber Optic Components	IEC 60874-1	Connectors for Optical Fibers and Cables, Generic Standard	IEC 61300 series	Fiber Optic Interconnecting Devices and Passive Components, Basic Test and Measurement Procedures	UL 94	Tests for Flammability of Plastic Material for Parts in Devices and Appliances	RoHS	Directive on Restriction of Hazardous Substances	
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# Fiber Optic Hybrid Adapter



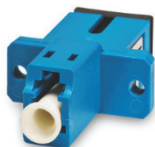
LC male to LC female  
single mode simplex  
FAH-11-LCMLCF-SP



LC male to LC female  
APC single mode simplex  
FAH-13-LCMLCF-SP



LC male to LC female  
multimode simplex  
FAH-22-LCMLCF-SP



LC female to SC female  
single mode simplex  
FAH-11-LCFSCF-SP



LC female to SC female  
APC single mode simplex  
FAH-13-LCFSCF-SP



LC female to SC female  
multimode simplex  
FAH-22-LCFSCF-SP



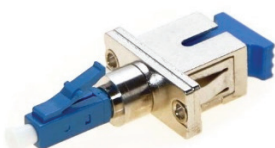
LC female to SC male  
single mode simplex  
FAH-11-LCFSCM-SP



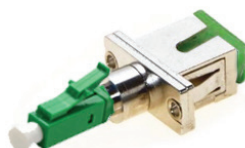
LC female to SC male  
APC single mode simplex  
FAH-13-LCFSCM-SP



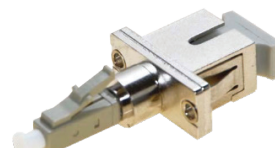
LC female to SC male  
multimode simplex  
FAH-22-LCFSCM-SP



LC male to SC female  
single mode simplex  
FAH-11-LCMSCF-SM



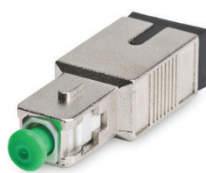
LC male to SC female  
APC single mode simplex  
FAH-13-LCMSCF-SM



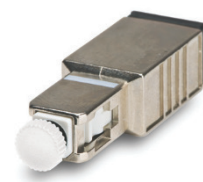
LC male to SC female  
multimode simplex  
FAH-22-LCMSCF-SM



SC male to SC female  
single mode simplex  
FAH-11-SCMSCF-SM



SC male to SC female  
APC single mode simplex  
FAH-13-SCMSCF-SM



SC male to SC female  
multimode simplex  
FAH-22-SCMSCF-SM



ST female to FC male  
single mode simplex  
FAH-11-STFFCM-SM



ST male to FC female  
single mode simplex  
FAH-11-STMFCF-SM



ST female to FC female  
single mode simplex  
FAH-11-STFFCF-SM



ST male to ST female  
single mode simplex  
FAH-11-STMSTF-SM

# Fiber Optic Hybrid Adapter



FC male to FC female  
single mode simplex  
FAH-11-FCMFCF-SM



FC male to FC female  
multimode simplex  
FAH-22-FCMFCF-SM



ST male to ST female  
single mode simplex  
FAH-11-STMSTF-SM



ST male to ST female  
multimode simplex  
FAH-22-STMSTF-SM



SC female to FC female  
single mode simplex  
FAH-11-SCFFCF-SM



SC female to FC female  
multimode simplex  
FAH-22-SCFFCF-SM



SC female to ST male  
single mode simplex  
FAH-11-STMSCF-SM



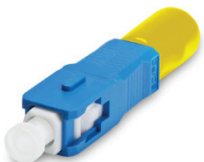
SC female to ST male  
multimode simplex  
FAH-22-STMSCF-SM



SC male to FC female  
single mode simplex  
FAH-11-SCMFCF-SP



SC male to FC female  
multimode simplex  
FAH-22-SCMFCF-SP



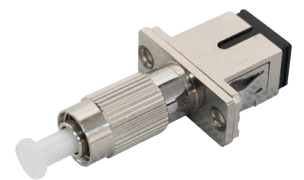
SC male to ST female  
single mode simplex  
FAH-11-SCMSTF-SP



SC male to ST female  
multimode simplex  
FAH-22-SCMSTF-SP



SC female to FC male  
single mode simplex  
FAH-11-SCFFCM-SM



SC female to FC male  
multimode simplex  
FAH-22-SCFFCM-SM



SC female to ST female  
single mode simplex  
FAH-11-SCFSTF-SP



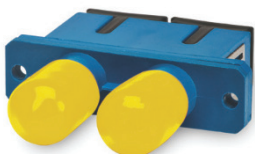
SC female to ST female  
multimode simplex  
FAH-22-SCFSTF-SP



LC male to FC female  
single mode simplex  
FAH-11-LCMFCF-SM



LC male to FC female  
multimode simplex  
FAH-22-LCMFCF-SM



SC female to ST female  
single mode duplex  
FAH-11-SCFSTF-DP



SC female to ST female  
multimode duplex  
FAH-22-SCFSTF-DP



LC female to FC male  
single mode simplex  
FAH-11-LCFFCM-SM



LC female to FC male  
multimode simplex  
FAH-22-LCFFCM-SM

# Fiber Optic Hybrid Adapter

Fiber Optic Hybrid Adapter  
Part Number Builder

**FAH - A B - CCC DDD - E F**

Sleeve	Performance	Interface 1		Interface 2	Configuration	Housing
<b>1</b> Zirconia Ceramic	<b>1</b> Single mode	<b>SCM</b> SC male	<b>STM</b> ST male	<b>SCF</b> SC female	<b>S</b> Simplex	<b>P</b> Thermoplastic
<b>2</b> Phosphorous Bronze	<b>2</b> Multimode	<b>LCM</b> LC male	<b>FCM</b> FC male	<b>STF</b> ST female	<b>D</b> Duplex	<b>M</b> Metal
	<b>3</b> APC single mode	<b>SCF</b> SC female	<b>STF</b> ST female	<b>LCF</b> LC female		
		<b>LCF</b> LC female	<b>FCF</b> FC female	<b>FCF</b> FC female		
				<b>DNF</b> DIN female		

Ordering Information	Description	Part Number				
	Fiber Optic Hybrid Adapter	OXIN-FAH-XX-XXXXXX-XX				
Packaging	Description					
	20 or 25 pcs/lot					
Optical Performance	Parameter	SM UPC	SM APC	OM1	OM2	OM3
	Insertion Loss	≤ 0.3 dB	≤ 0.3 dB	≤ 0.3 dB	≤ 0.3 dB	≤ 0.3 dB
	Return Loss	≤ -55 dB	≤ -65 dB	N.A	N.A	N.A
Physical Characteristics	Parameter	Value				
	Fiber count capacity	Simplex (1 fiber), duplex (2 fibers)				
	Plastic material	UL 94V-0 ABS high-impact thermoplastic				
Mechanical Characteristics	Parameter	Value				
	Operating temperature	-40 ~ +75°C				
	Storage temperature	-40 ~ +85°C				
	Temperature cycling	-40 ~ +75°C , 40 cycles = 0.2 dB change				
	High temperature	70°C for 96 hours = <0.4 dB change				
	Mating durability	500 mating cycles (cleaning every 25 matings) = <0.2dB change				
Damp heat	40°C at %93 RH for 96 hours = <0.4 dB change					



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OXIN-FAH Data Sheet  
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