

Patchcord Duplex E2000/APC-SC/APC

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Patchcord Duplex E2000/APC-SC/APC

Sales No. PC-DX-E2000A-SCA

Manufacturer: FiberHK

Product Category: Patchcord | Duplex

Precision Engineered Fiber Optic Solutions

FHK operates a state-of-the-art cable assembly facility specializing in the manufacture of high-performance patch cords and pigtails. Utilizing premium-grade connectors and optical cables, each assembly undergoes

Rigorous Testing

IEC-compliant optical performance validation

Traceable Quality

Unique ID with certified test reports

Standardized Production

ISO-certified manufacturing processes

Features

- Latching Mechanism: Push-pull self-locking with dust cap
- Dust Protection: Integrated spring-loaded shutter (auto-closing)
- Polish Type: APC (8° angle) standard, UPC optional
- Ferrule Material: Zirconia ceramic (Ø1.25mm)
- ESD Protection: <0.1kV electrostatic discharge protection
- Keying System: Color-coded housing (Green = APC, Blue = UPC)
- Compact Design: 30% smaller than SC connectors (16.5×15.8mm)
- Medical Certification: IEC 60601-1 compliant for laser medical devices

Applications

- Telecom: FTTH OLT ports, 5G AAU fronthaul, WDM/PON systems
- Medical: Endoscopy lasers, MRI systems, surgical robotics
- Industrial: Petrochemical sensors, railway signaling, nuclear plant controls
- Marine: Subsea communications, shipboard networks, offshore platforms
- Broadcast: OB vans, satellite uplinks, 4K/8K video production
- Defense: Battlefield comms, drone control links, secure facilities

General Mechanical Specifications for Fiber Optic Patch Cords

Parameter	Patch Cord	Pigtail
Insertion Loss	≤0.3 dB	≤0.3 dB
Return Loss (APC)	≥60 dB	≥60 dB
Mating Cycles	>1,000	>500
Tensile Strength	>100 N	>80 N
Operating Temperature	-40°C ~ +85°C	-40°C ~ +85°C
Crush Resistance	>200 N/cm	N/A
Shock Resistance	ΔIL≤0.2dB (50g/11ms)	ΔIL≤0.2dB (50g/11ms)

(Not applicable to E2000. E2000 is simplex/duplex only. MPO compatibility requires hybrid adapters)

Additional Specifications for Pigtails

Parameter	Specification	Test Method
Bare Fiber Length	1.0±0.1 m (Custom: up to 5m)	IEC 60793-1-20
Coating Diameter	245±10 μm	IEC 60793-1-20
Splice Strength	>1.0 GPa	IEC 61300-3-22
Fanout Length	0.6m/1.2m/1.8m (Standard)	Custom
Cable Type	900μm tight buffer, 2.0mm breakout	IEC 60794-2-50
Thermal Cycling	ΔIL≤0.1dB (-40°C ~ +85°C, 10 cycles)	IEC 61300-2-22

Key Differences by Connector Type

Type	Ferrule Diameter	Mating Cycles	IP Rating	Typical Applications	Locking Mechanism
E2000	Ø1.25 mm	>500	IP68	Data Centers and Cloud Computing Infrastructure	Push-pull latch

Type	Ferrule Diameter	Mating Cycles	IP Rating	Typical Applications	Locking Mechanism
LC	Ø1.25 mm	>500	IP40	High-density (SFP modules)	Latch
SC	Ø2.5 mm	>1,000	IP50	Data centers/Telecom	Push-pull
FC	Ø2.5 mm	>1,000	IP67	High-vibration environments	Threaded
MPO	6.4×2.4 mm	>500	-	40G/100G SR4 modules	Push-pull with guide pins
MU	Ø1.25 mm	>500	-	Japan market	Push-pull
ST	Ø2.5 mm	>500	IP54	Legacy networks	Bayonet

Critical Notes Table

Ref	Category	Requirement
1	Cleaning	Use dry E2000 cleaning tools only (No IPA alcohol)
2	APC Applications APC	Mandatory for CATV/WDM systems with >10mW laser power
3	Adapter Compatibility	Hybrid adapters required for E2000-LC/SC connections
4	Medical Use	Gold-plated version required for IEC 60601-1 compliance
5	Salt Environments	Specify stainless steel latch mechanism for marine applications

Availability

Option	Choices
Patch Cord	
Fiber Type	OS2 (G.652D), OM3, OM4, OM5
Configuration	Simplex, Duplex
Cable Diameter	0.9mm (high-flex), 2.0mm (standard), 3.0mm (armored)
Lengths	0.5/1/2/3/5/10/15/20/30m (Std), Custom ≤100m
Connector Combos	E2000-E2000, E2000-LC, E2000-SC
Jacket Material	PVC (Indoor), LSZH (Riser), OFNP (Plenum)
Pigtails	

Option	Choices
Fiber Type	OS2, OM4 OS2 , OM4
Termination	Bare fiber (250/900µm), 0.9mm tight buffer
Lengths	1.0/1.5/2.0m (Std), Custom ≤5m
Fiber Count	1-12 fibers (with breakout tubing)
Connector Polish	APC (Std), UPC (Opt)
Kits	6/12/24-port rack mount kits available
Certification	Individual test report per IEC 61300-3-35

Purchase Information

Product Type	Fiber Type	Fiber Spec	Structure	Conn A	Polish A	Conn B	Polish B	Diam (mm)	Length
Patch cord	SM	9/125	Simplex	E2000	APC	E2000	APC	0.9	0.5M
									1M
	MM	50/125	Duplex	FC	UPC	FC	UPC	2.0	1.5M
									2M
									3M
									5M
									10M
									20M
									25M
									30
Custom lengths available									
				LC	PC	LC	PC	3.0	5M
									10M
									20M
									25M
				MPO		MPO			30
									Custom lengths available
				MU		MU			30
									Custom lengths available
				SC		SC			Custom lengths available
									Custom lengths available
				ST		ST			Custom lengths available
									Custom lengths available

Product Type	Fiber Type	Fiber Spec	Structure	Conn A	Polish A	Tail End	Diam (mm)	Length	
Pigtail	SM	9/125	Simplex	E2000	APC	BF	0.9	0.5M	
								1M	
	MM	50/125	Duplex	FC	UPC			2.0	1.5M
									2M
									3M
									5M
									10M
									20M
									25M
									30
Custom lengths available									
				LC	PC		3.0	3M	
								5M	
								10M	
								20M	
				MPO				10M	
								20M	
				MU				25M	
								30	
				SC				Custom lengths available	
								Custom lengths available	
				ST				Custom lengths available	
								Custom lengths available	

[Product Specification \(PDF\)](#)

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