



# ITT

Interconnect Solutions  
Cannon, VEAM, BIW

Providing **100%** optical signal  
**reliability** in sending higher  
bandwidth data streams  
in the harshest environments



*Engineered for life*

**PHD Fiber Optic Terminus Adapter for Combo D-Sub Connectors**

**Hybrid Connector (Electrical/Fiber Optic)**

Size 8 terminus adapter allows any PHD optical terminus to be coupled into Combo D connector.

**Multi-functional Interconnect Series**

- Combining: 30 Amp power contacts (straight/right-angle)
- RF contacts (straight/right angle)
- Size 22 LF signal contacts (straight/right angle)
- Size 22 Fiber Optic Termini (Singlemode & Multimode)



	Multimode 62.5/125	Singlemode SMF 28
Ferrule (O.D.)	1.25 mm	1.25 mm
Insertion Loss (dB typ.)	0.30	0.25
Maximum Loss (dB max.)	0.50	0.35
Return Loss (dB typ.)	25	56
Return Loss (dB min.)	20	50
Channel Servicing	Single	
Channel Repair	Single	
Cyclic Durability	1000	



Fiber Optic Terminus Part Numbers		
Genderless Terminus for use with PHD Adapters & Combo-D Connectors		
Fiber Type	Ferrule I.D.	Part Number
Singlemode SMF28	125	031-9727-007
Multimode 50/125 & 62.5/125	127	031-9727-008
Multimode 100/140	142	031-9727-003

PHD Adapter Part Numbers	
Pin	Socket
140285-0000	140286-0000

Fiber Optics



PRODUCT NOTES	
<p><b>1. Packaging:</b> Identification includes manufacturer's name and part number</p> <p><b>2. Material / Finish:</b>                      Ferrule: Zirconia Ceramic / N.A.                      Terminus assembly: Brass Alloy / Gold plating                      Adapter assembly: Stainless steel / Passivate-hardware</p>	<p><b>3. Insertion / Removal tool:</b> (Termini): 274-0053-0000                      Extraction Tool (Adapter): CET-C6B-2</p> <p><b>4.</b> Consult factory for assembly and termination tools or factory build cable assemblies.</p> <p><b>5. Applications:</b> Military/Aero space Fiber Optic Interconnect environments.</p>

PHD SuperLC Fiber Optic Connector System

**LC Compliant Fiber Optic Connector System to meet Telecordia GR-326-CORE**

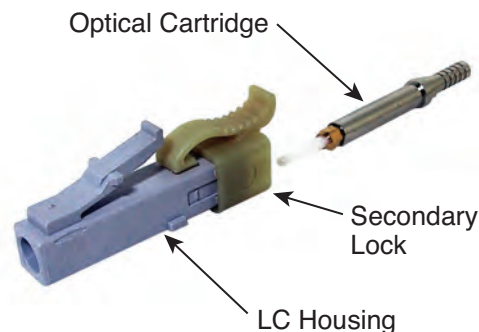
Harsh environmental small form-factor connector system providing higher thermal environment and superior mechanical environment stability/durability than a standard LC connector while maintaining the same high-end optical performance characteristics that supports both singlemode and multimode fiber configurations.

**Product Features**

- Higher thermal environment stability/durability  
High temperature plastic used for housing and secondary lock.  
Secondary Lock prevents thermal relaxation of cantilever latch in high temperature environments.

- Superior mechanical environment stability/durability  
Secondary Lock prevents mechanical release in high shock/vibration environment.
- Reparability / Maintenance  
Optical Cartridge a standalone optical element separable from connector plastic body for quick and easy field repair.
- Crimp termination of cable jacketing to rear body section
- Designed for use with either tight or loose buffered fiber cable solutions
- Singlemode (tuned or un-tuned) and multimode fiber capable
- Meets Lucent 640-252-053 & Telecordia GR-326 requirements insuring Mechanical / optical interface Interchangeability / Compatibility.

	Multimode 62.5/125	Singlemode SMF 28
Ferrule (O.D.)	1.25 mm	1.25 mm
Insertion Loss (dB typ.)	0.30	0.25
Maximum Loss (dB max.)	0.50	0.40
Return Loss (dB typ.)	25	55
Return Loss (dB min.)	20	50
Cyclic Durability	1000	



Connector Configuration	Fiber Type	Part Number	Housing Color
SIMPLEX	Multimode	140277-0000	Beige
	Singlemode	140290-0000	Blue
	APC	140292-0000	Green
DUPLEX	Multimode	140289-0000	Beige
	Singlemode	140291-0000	Blue
	APC	140293-0000	Green

PRODUCT NOTES	
<p><b>1. Packaging:</b> Packaging identification includes manufacturer's name and part number</p> <p><b>2. Material / Finish:</b>                      Ferrule: Zirconia Ceramic / N.A.                      Terminus assembly: Stainless steel / Passivate-hardware                      Housing: High Temperature thermal plastic</p>	<p><b>3. Tooling:</b> Tuning Wrench PN - 980-2007-001                      Tuning Kit PN - 980-2007-002</p> <p><b>4. Instructions:</b> Consult factory for assembly instructions and termination tool list.</p> <p><b>5. Applications:</b> Military/Aero space Fiber Optic Interconnect environments.</p>

Dimensions shown in inches (mm)  
 Specifications and dimensions subject to change

