

OptiTap® Compatible Squid Assemblies



Product Overview:

NetSource Squid Assemblies are available in 1×4, 1×8, and 1×12 PLC splitter configurations and are used inside OSP terminals to distribute feeder fibers to OptiTap®-compatible hardened subscriber ports. They are installed in pedestals, handholes, and compact terminal housings to support subscriber turn-ups, network expansion, and routine maintenance. Each assembly contains a passive PLC splitter with OptiTap®-compatible hardened SC/APC connectors for subscriber interfaces and provides organized routing for fiber-to-the-home (FTTH) and broader access deployments.

Product Specifications:

- Fiber Count: 1×4, 1×8, or 1×12 PLC splitter configurations
- Connector Type: Hardened SC/APC
- Fiber Type: Singlemode
- Input Breakout Length: 0.3m, red color-coded for easy identification
- Output Breakout Length: 0.5m
- Connector Labeling: All connectors are labeled for quick identification

Environmental & Mechanical Properties:

- Operating Temperature: -40°C to 70°C (-40°F to 158°F)
- Cold Mate/Demate Performance: Tested to -40°C (-40°F)
- OptiTap® Connector Pull Rating: 100 lbs

Features & Benefits:

- Fiber Count: 1×4, 1×8, or 1×12 PLC splitter configurations
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Part Numbers:

Part Number	Description
HE-1X4SM53	4-Port OptiTap® Compatible Squid Assemblies
HE-1X8SM53	8-Port OptiTap® Compatible Squid Assemblies

Conformance Standards:

Optical Performance	FOTP-171 (TIA/EIA-455-171) – Insertion Loss
	FOTP-107 (TIA/EIA-455-107) – Return Loss
Endface Geometry & Inspection	IEC 61300-3-35 – Visual Inspection
	IEC 61755-3-1 – Endface Geometry — Single-Fiber
	IEC 61755-3-32 – Endface Geometry — MT Ferrules (Multifiber)
Environmental/ Mechanical (Connectors & Assemblies)	GR-3120 – Environmental, Mechanical & Performance Requirements
	IP68 – Ingress Protection — OptiTip® / OptiTap® Interfaces
Outdoor Cable Requirements	GR-20 – Outside Plant Cable Environmental & Mechanical Requirements
Environmental Compliance	RoHS/REACH – Environmental Compliance

Insertion Loss Chart:

Parameter	1x4	1x8
Operating Wavelength (nm)	1260-1650	
Fiber Type	G657A1 or Customized	
Insertion Loss (dB)	7.1	10.2
Loss Uniformity (dB)	≤0.5	≤0.8
Polarization Dependent Loss (dB)	≤0.25	≤0.25
Return Loss (dB)	≤55	
Directivity (dB)	≤55	
Wavelength Dependent Loss (dB)	1.0 or Customized	
Temperature Stability (dB)	-40°C to 85°C (≤0.5)	
Operating Temperature	-40°C to 85°C	
Storage Temperature	-40°C to 85°C	
Maximum Power (mW)	300	