

COPPER APPARATUS

Founded in 1984, AFL is a global leader providing fiber optic products, equipment, and engineering services to the telecommunications, electric utility, wireless, energy, private network and OEM markets. AFL also serves a diverse mix of industry segments that include service providers, military and defense, mining, oil and gas, and biomedical.

AFL brings years of experience in developing solutions for customers, fostering a creative culture to drive and deploy innovative technologies that will improve communications for years to come. Our product line consists of fiber optic cable, optical connectivity, fusion splicers and test equipment as well as fiber management systems, closures and accessories.

AFL is dedicated to bringing our customers a quality product as well as delivering superior value.







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SNI®-2900 Network Interface Device

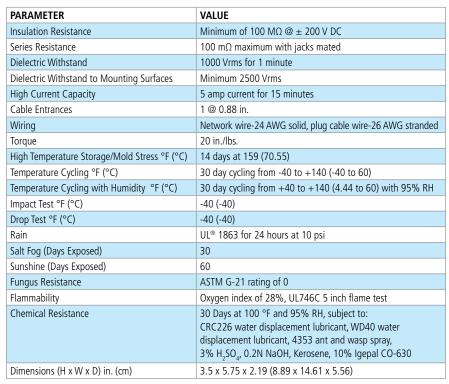
The SNI-2900 is designed to meet requirements for one to two line outdoor residential NIDs. This unit can be equipped with two individual line modules and two station protectors.

Features

- Field upgradeable individual line modules
- Optional individual subscriber security covers
- Remote testing electronics and RFI filters
- Rugged, weatherproof thermoplastic alloy housing
- Grommeted entrances
- Designed and tested to Telcordia® GR-49-CORE
- UL® Listed









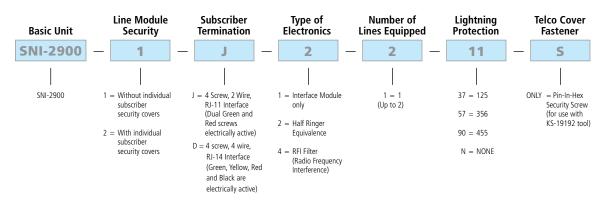


SNI®-2900 Network Interface Device

Standard Configurations

MODEL NO.	AFL NO.
SNI-2900 - 1J - 1 - 1 - 90 - H	DM000652
S-Footprint adapter for K-Footprint Modules available.	DM000717

Custom Order Matrix (consult customer service for availability)



EXAMPLE: SNI-2900 - 1 - J - 2 - 2 - 57 - S

This model number indicates that the following has been ordered:

SNI-2900 housing, supplied without individual subscriber security covers, line module includes; 4 screws, 2 wire RJ-11 interface with dual Green and Red screws, Half Ringer equivalence, two line capacity, 356 lightning protection and a Pin-In-Hex security screw for telco cover fastener.







The SNI-730 is designed to meet requirements for one to three line outdoor residential NIDs. This unit can be equipped with three individual line modules and three station protectors.

Features

- Compatible with Corning Cable Systems CAC®-7600
- Replacement for Tyco RAYNID
- Field upgradeable individual line modules
- Optional individual subscriber security covers
- Remote testing electronics and RFI filters
- Rugged, weatherproof thermoplastic alloy housing
- Grommeted entrances
- Designed and tested to Telcordia® GR-49-CORE
- UL[®] Listed



Specifications

PARAMETER	VALUE
Insulation Resistance	Minimum of 100 M Ω @ \pm 200 V DC
Series Resistance	100 m Ω maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Wire Installation Spacings	1" for drop wire, 1/4" for inside wire
Wiring	Network wire-24 AWG solid, plug cable wire-26 AWG stranded
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling °F (°C)	30 day cycling from -40 to +140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from +40 to +140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40)
Drop Test °F (°C)	-40 (-40)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 inch flame test
Chemical Resistance	30 Days at 100 °F and 95% RH, subject to: CRC226 water displacement lubricant, WD40 water displacement lubricant, 4353 ant and wasp spray, 3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (cm)	6.50 x 8.63 x 3.00 (16.51 x 21.92 x 7.62)



"S" Footprint Adapter for "K" Footprint Line Modules

CAC is a registered trademark of Corning Cable Systems Brands, Inc.

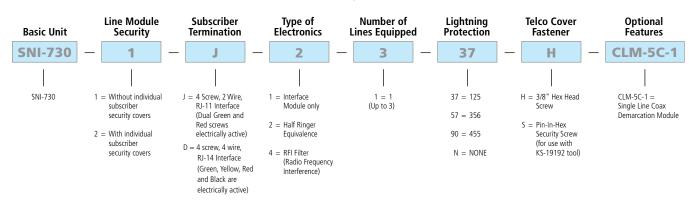


SNI®-730 Network Interface Device

Ordering Information - Standard Configurations

MODEL NO.	AFL NO.
SNI - 730 - 1J - 1 - 1 - 90 - H	DM000653
S-Footprint adapter for K-Footprint Modules available.	DM000717

Custom Order Matrix (consult customer service for availability)



EXAMPLE: SNI-730 - 1 - J - 2 - 3 - 37 - H - CLM-5C-1

This model number indicates that the following has been ordered:

SNI-730 housing, supplied without individual subscriber security covers, line module includes; 4 screws, 2 wire RJ-11 interface, Half Ringer equivalence, three line capacity, 125EW lightning protection, 3/8" Hex Head screw for telco cover fastener, and an optional single line coax demarcation module.







The SNI-760 is designed to meet requirements for one to six line outdoor residential NIDs. This unit can be equipped with six individual line modules and six station protectors.

Features

- Compatible with Corning Cable Systems CAC®-7600
- Replacement for Tyco RAYNID
- Field upgradeable individual line modules
- Optional individual subscriber security covers
- Remote testing electronics and RFI filters
- Rugged, weatherproof thermoplastic alloy housing
- Grommeted entrances
- Designed and tested to Telcordia[®] GR-49-CORE
- UL[®] Listed



Specifications

PARAMETER	VALUE
Insulation Resistance	Minimum of 100 MΩ @ ± 200 V DC
Series Resistance	100 mΩ maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Wire Installation Spacings	1" for drop wire, 1/4" for inside wire
Wiring	Network wire-24 AWG solid, plug cable wire-26 AWG stranded
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling °F (°C)	30 day cycling from -40 to +140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from +40 to +140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40)
Drop Test °F (°C)	-40 (-40)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 inch flame test
Chemical Resistance	30 Days at 100 °F and 95% RH, subject to: CRC226 water displacement lubricant, WD40 water displacement lubricant, 4353 ant and wasp spray, 3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (cm)	10.00 x 8.37 x 3.00 (25.40 x 21.92 x 7.62)



"S" Footprint Adapter for "K" Footprint Line Modules

CAC is a registered trademark of Corning Cable Systems Brands, Inc.

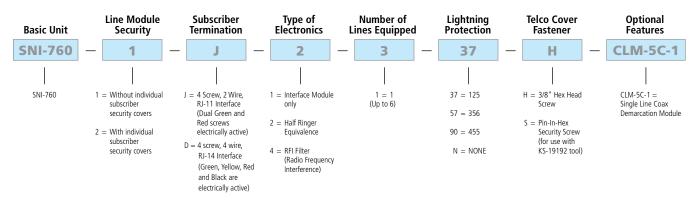


SNI®-760 Network Interface Device

Ordering Information – Standard Configurations

MODEL NO.	AFL NO.
SNI - 760 - 1 - J - 1 - 1 - 90 - H	DM000654
SNI - 760 - 1 - J - 1 - 1 - 57 - H	DM000890
SNI - 760 - 1 - J - 1 - 2 - 90 - H	DM000877
SNI - 760 - 1 - J - 1 - 6 - 90 - H	DM000936
S-Footprint adapter for K-Footprint Modules available.	DM000717

Custom Order Matrix (consult customer service for availability)



EXAMPLE: SNI-760 - 1 - J - 2 - 3 - 37 - H - CLM-5C-1

This model number indicates that the following has been ordered:

SNI-760 housing, supplied without individual subscriber security covers, line module includes; 4 screws, 2 wire RJ-11 interface, Half Ringer equivalence, three line capacity, 125EW lightning protection, 3/8" Hex Head screw for telco cover fastener, and an optional single line coax demarcation module.











"S" Footprint Adapter for "K" Footprint Line Modules

SNI®-760XL Network Interface Device

The SNI-760 is designed to meet requirements for one to six line outdoor residential NIDs. This unit can be equipped with six individual line modules and six station protectors.

Features

- Compatible with Corning Cable Systems CAC®-7600
- Replacement for Tyco RAYNID® DATAGUARD 760XL
- Field upgradeable individual line modules
- Optional individual subscriber security covers
- Remote testing electronics and RFI filters
- Rugged, weatherproof thermoplastic alloy housing
- Grommeted entrances
- Designed and tested to Telcordia® GR-49-CORE
- UL[®] Listed
- Capable of holding 6 lines and additional bunching blocks plus more room for wire storage
- Versatile/movable inner plate for accommodating broadband wiring integration, retrofit installations

Specifications

PARAMETER	VALUE
Insulation Resistance	Minimum of 100 M Ω @ \pm 200 V DC
Series Resistance	100 m Ω maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Wire Installation Spacings	1" for drop wire, 1/4" for inside wire
Wiring	Network wire-24 AWG solid, plug cable wire-26 AWG stranded
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling °F (°C)	30 day cycling from -40 to +140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from +40 to +140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40)
Drop Test °F (°C)	-40 (-40)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 inch flame test
Chemical Resistance	30 Days at 100 °F and 95% RH, subject to: CRC226 water displacement lubricant, WD40 water displacement lubricant, 4353 ant and wasp spray, 3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (cm)	13.13 x 12.88 x 3.5 (33.35 x 32.72 x 8.89)

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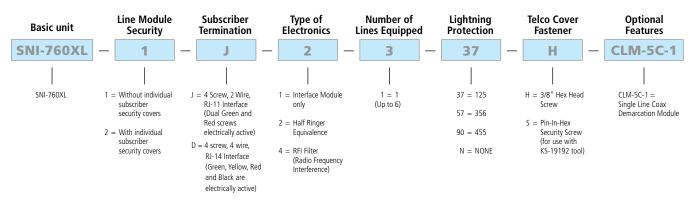


SNI®-760XL Network Interface Device

Ordering Information - Standard Configurations

MODEL NO.	AFL NO.
SNI - 760XL - 1J - 1 - 1 - 90 - H	DM000805
S-Footprint adapter for K-Footprint Modules available.	DM000717

Custom Order Matrix (consult customer service for availability)



EXAMPLE: SNI-760XL - 1 - J - 2 - 3 - 37 - H - CLM-5C-1

This model number indicates that the following has been ordered:

SNI-760XL housing, supplied without individual subscriber security covers, line module includes; 4 screws, 2 wire RJ-11 interface, Half Ringer equivalence, three line capacity, 125EW lightning protection, 3/8" Hex Head screw for telco cover fastener, and an optional single line coax demarcation module.





LMS ADSL2 / VDSL2 Splitter



LMK ADSL2 / VDSL2 Splitter

LMS/LMK ADSL2 / VDSL2 Splitter

The LMS/LMK ADSL2 / VDSL2 Splitter is a low-pass filter designed to enable POTS service to coexist with ADSL2 and VDSL2 data signals up to 30 MHz.

As networks evolve and the microfilters typically used for xDSL connectivity hit their limitations, carriers need alternative, high-bandwidth CPE solutions that take them to their preferred demarcation point. AFL's splitters support VDSL2 while remaining backwards-compatible with existing ADSL technologies.

AFL splitters prevent interference between POTS and VDSL2 signals, ensuring high-quality delivery of voice and enhanced data service such as video. Their innovative design addresses specific issues that affect video quality such as ring-trip.

Features unique to the splitter include the addition of secondary surge protection and a test jack. Connection to the DSL modem and telephone equipment is straight forward and clearly labelled for both the installer and home owner. Insulation Displacement Connectors (IDCs) ensure quick and reliable connections and do not require any tools.

Features

- Industry compliant
- Compatible with AFL SNI®-2900, SNI-730 and SNI-760 Network Interface Devices
- Fits Corning Cable Systems CAC® 7600 and Tyco RAYNIDs
- Insulation displacement connectors (IDCs) for easy installation
- Environmentally hardened
- Secondary lightning/surge suppression
- Compliant to Telcordia® and CSA/UL standards
- Avaliable in bonded XDSL version

Specifications

PARAMETER	VALUE
Weight	100 grams (.2 lbs.)
Capacity	One subscriber loop per line unit; (1) Data output, (3) Voice outputs
Bonded Capacity	(2) Data outputs, (2) Voice ouputs
Communications Interface	The splitter connects to the xDSL, POTS service, and local loop using insulation displacement connectors
Compliance	T1.413, T1.424, ITU-T G.992.1 , G.992.3, G.992.5, G.993.1 and G.993.2, CSA/UL, FCC part 68, CSO3
Environment	Operating Temperature: -40°C to +65°C Storage Temperature: -40°C to +70°C

Ordering Information

MODEL NO.	AFL NO.
LMS ADSL2 / VDSL2 Splitter	DM000695
LMK ADSL2 / VDSL2 Splitter	DM000699
LMS ADSL2 / VDSL2 Bonded Splitter	DM000695B
LMK ADSL2 / VDSL2 Bonded Splitter	DM000699B

CAC is a registered trademark of Corning Cable Systems Brands, Inc.





LMS Line Modules for Network Interface Devices

The strength of the Network Interface Device (NID) product line lies in our versatile family of Line Interface Modules. The LMS Line Module has been an integral part of the NID market for years with millions of NIDs deployed throughout the country.

Features

- Field upgradeable
- Standard line module footprint
- Self-contained, simply press in place
- Available with half ringers and RFI filters
- Line modules used in: SNI®-2900, SNI-730, SNI-760 NIDs
- Optional individual subscriber security cover available
- UL[®] Listed
- Compatible with Corning CAC® 7600 and Tyco RayNID®

Specifications

PARAMETER	VALUE
Contact Construction	50 micro inches hard gold / 100 micro inches nickel plated phosphor bronze
Contact Force	Minimum 100 grams
Temperature Cycling with Humidity	30 day cycling from 40° to 120°F (4.44° to 48.88°C) with 90% RH
Coax Module Impedance Insertion Loss Return Loss "F" Connector Coax Cable RF Shielding	75 Ω ≤ 0.12 dB maximum, 5 MHz-1 GHz ≤ 21 dB minimum, 5 MHz-1 GHz Meets SCTE specification IPS-SP-400 Conforms to MIL-C-17/94F specification 100 dB, 5 MHz to 1 GHz, tested per MIS-20097D
xDSL	1 REF: LMS ADSL2/VDSL2 Data Sheet 2 REF: LPF-200 ADSL Data Sheet

Standard Configurations

MODEL NO.	AFL NO.
LMS 1-J-1	DM00024
LMS 1-J-1-90	DM000768
LM 1-C-1 w/ Adapter Bracket	DM000656
LMS ADSL2/VDSL2 Splitter	DM000695
CLM-5C-1	DM000142
LPF-200 w/ Adapter Bracket	DM000658

CAC is a registered trademark of Corning Cable Systems Brands, Inc.



LMS Line Modules for Network Interface Devices

Typical Configurations







LM 1-C1 Module w/ Adapter Bracket (Bunch Block)



LMS ADSL2+/VDSL2 Splitter

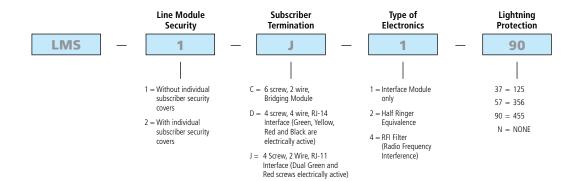


CLM-5C-1 (Coax Line Module)



LPF-200 ADSL Splitter w/ Adapter Bracket

Custom Order Matrix (consult customer service for availability)



EXAMPLE: LMS - 1 - J - 1 - 90

This model number indicates that the following has been ordered: A line module, supplied with an individual subscriber security cover, 4 screws, 2-wire RJ-11 interface circuit module (interface only) and is supplied with a 45-HS lightning protector.





SNI®-1100 Network Interface Device

The SNI-1100 is the perfect solution for your one-line outdoor residential Network Interface Device (NID) needs. The unit is equipped with a single line modular jack for subscriber testing and is available, on a custom order basis, with a wide variety of lightning protection. In addition, a half-ringer equivalent circuit can installed in the SNI-1100.

Features

- Rugged, weatherproof thermoplastic alloy housing
- Grommeted entrances
- Designed and tested to Telcordia® GR-49-CORE

Specifications

PARAMETER	VALUE
Insulation Resistance	Minimum of 100 m Ω @ \pm 200 V DC
Series Resistance	100 mΩ maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Wire Installation Spacings	1" for drop wire, 1/4" for inside wire
Wiring	Network wire-24 AWG solid, plug cable wire-26 AWG stranded
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling °F (°C)	30 day cycling from -40 to 140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from 40 to 140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40)
Drop Test °F (°C)	-40 (-40)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 flame test
Chemical Resistance 30 Days at 100 °F and 95% RH Subject to:	CRC226 water displacement lubricant, WD40 water displacement lubricant, 4353 ant and wasp spray, 3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (cm)	6.25 x 5.87 x 2.5 (20.32 x 21.92 x 7.62)

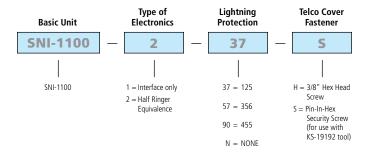


SNI®-1100 Network Interface Device

Standard Configurations

MODEL NO.	AFL NO.
SNI-1100 - 1 - X - H	90160-01

Custom Order Matrix (consult customer service for availability)



EXAMPLE: SNI-1100 - 2 - 57 - S

This model number indicates that the following has been ordered: SNI®-1100 housing, supplied with Half Ringer equivalence, 356 lightning protection and Pin-in-Hex Security Screw for the telco cover fastener.





SNI®-1600 Mounting Bracket

The SNI-1600 Mounting Bracket provides a mounting location in MDU environments or anywhere locating a traditional Network Interface Device is difficult. The SNI-1600 is ideally designed for use with the SF-100 and SFB-100 Splitter/Filters in conjunction with delivery of IPTV video services. The SNI-1600 can also be used with any line module using the standard footprint. The SNI-1600 is suitable for indoor wall or hand box mounting or may be mounted outdoors in a suitable demarcation enclosure.

Features

- Small footprint for tight spaces
- Accepts line module with standard footprint
- High grade industrial polymer housing

Specifications

PARAMETER	VALUE
Insulation Resistance	Minimum of 100 m Ω @ \pm 200 V DC
Series Resistance	100 mΩ maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Wire Installation Spacings	1" for drop wire, 1/4" for inside wire
Wiring	Network wire-24 AWG solid, plug cable wire-26 AWG stranded
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	7 days at 158 (70)
Temperature Cycling °F (°C)	30 day cycling from -40 to 140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from 40 to 140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	77 (25)
Drop Test °F (°C)	77 (25)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 flame test
Chemical Resistance	
30 Days at 100 °F and 95% RH Subject to:	CRC226 water displacement lubricant, WD40 water
	displacement lubricant, 4353 ant and wasp spray,
	3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (mm)	4.88 x 2.25 x 2.25 (123.95 x 57.15 x 57.15)



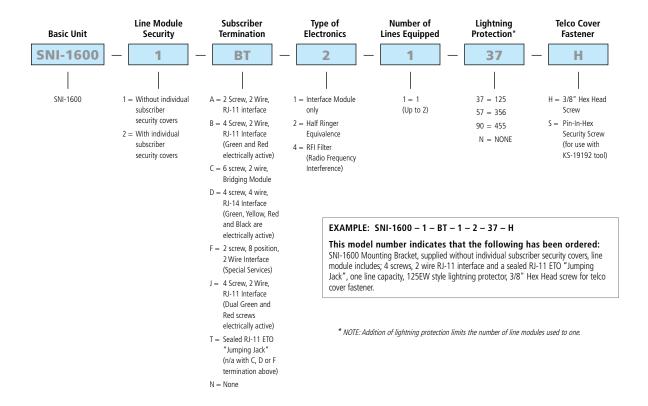
SNI®-1600 Mounting Bracket



COCOT Applications

The SNI-1600 is idealy suited for customer-owned coin-operated telephone services.

Custom Order Matrix (consult customer service for availability)







Terminal Access™ TA™-230 Demarcation Enclosure

AFL's Terminal Access TA-230 provides two standard line module positions and a single pair wire terminal. Mounting hardware and terminal studs are included. The TA-230 can be used as an adjunct box when the network interface is fully loaded. The enclosure features grommeted openings and a provision for a security device.

Features

- Corrosion proof and environmentally protected
- Pole or wall mountable
- Secure hinged cover design
- Grommeted cable entry/exit ports
- Impact and chemical resistant engineered thermoplastic





PARAMETER	VALUE
Insulation Resistance	Minimum of 100 m Ω @ \pm 200 V DC
Series Resistance	100 mΩ maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Cable Entrances	0.5" input, 0.5" output
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling °F (°C)	30 day cycling from -40 to 140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from 40 to 140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40)
Drop Test °F (°C)	-40 (-40)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 flame test
Chemical Resistance	
30 Days at 100 °F and 95% RH Subject to:	CRC226 water displacement lubricant, WD40 water
	displacement lubricant, 4353 ant and wasp spray,
	3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (cm)	3.13 x 3.63 x 2.5 (7.95 x 9.22 x 6.35)

DESCRIPTION	MODEL NO.	AFL NO.
Two line module positions, one pair terminal closure	TA-230	DM000647







Grommeted Entrances

SNI®-4300 Network Interface Device

The SNI®-4300 is designed to meet requirements for one to three line outdoor residential NIDs. This unit can be equipped with three line modules and three solid state or gas tube protectors. A single or dual coax line module can be installed with up to two voice line modules, both of which have common ground connection capability. The coax line module allows handoff to the subscriber coax termination using standard "F" connectors.

Features

- Field upgradeable individual line modules
- Optional individual subscriber security covers
- Optional coax demarc line module
- Remote testing electronics and RFI filters
- Rugged, weatherproof thermoplastic alloy housing
- Grommeted entrances
- Designed and tested to Telcordia® GR-49-CORE

Specifications

DADAMETED	VALUE
PARAMETER	VALUE
Insulation Resistance	Minimum of 100 M Ω @ \pm 200 V DC
Series Resistance	100 mΩ maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Wire Installation Spacings	1" for drop wire, 1/4" for inside wire
Wiring	Network wire-24 AWG solid,
	plug cable wire-26 AWG stranded
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling °F (°C)	30 day cycling from -40 to +140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from +40 to +140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40)
Drop Test °F (°C)	-40 (-40)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 inch flame test
Chemical Resistance	30 Days at 100 °F and 95% RH, subject to:
	CRC226 water displacement lubricant, WD40 water
	displacement lubricant, 4353 ant and wasp spray,
	3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (cm)	6.25 x 8.00 x 3.00 (16.26 x 20.32 x 7.62)

DESCRIPTION	MODEL NO.	AFL NO.
Network Interface Device	SNI-4300	911049-00
Network Interface Device	SNI-4300	911064-00



SNI®-4300 Network Interface Device



Recessed Pockets/Rear Entry Port

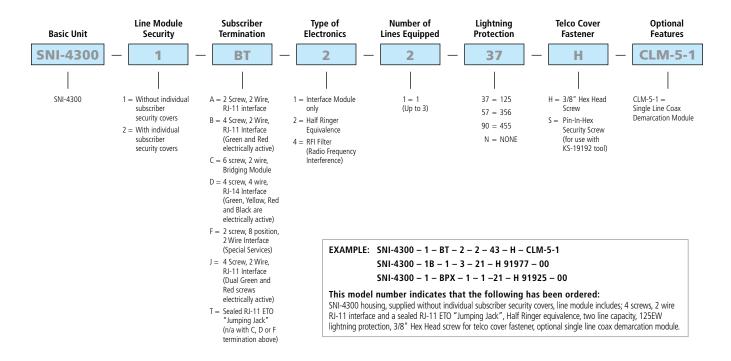
Recessed pockets have been added below the subscriber line modules to tuck away electronic packages, keeping the main compartment uncongested. In addition, three optional grommeted entry ports have been added to the back of the unit, allowing I/W to pass directly from the home to the subscriber wiring bridge.



Lock Staple/Telco Override

A view of both the telco and subscriber locking mechanisms. The subscriber can access the unit with a standard screwdriver and a stainless steel lock staple is provided for individual security. Telco override is provided and can be accessed with a standard 216 tool (security fastener option also available).

Custom Order Matrix (consult customer service for availability)









The SNI-4600 is designed to meet requirements for one to six line outdoor residential NIDs. This unit can be equipped with six Keptel line modules and six solid state or gas tube protectors. A single or dual coax line module can be installed with up to five voice line modules, both of which have common ground connection capability. The coax line module allows handoff to the subscriber coax termination using standard "F" connectors.

Features

- Field upgradeable individual line modules
- Optional individual subscriber security covers
- Optional coax demarc line module
- Remote testing electronics and RFI filters
- Rugged, weatherproof thermoplastic alloy housing
- Grommeted entrances
- Designed and tested to Telcordia® GR-49-CORE



Specifications

PARAMETER	VALUE
Insulation Resistance	Minimum of 100 M Ω @ \pm 200 V DC
Series Resistance	100 mΩ maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Wire Installation Spacings	1" for drop wire, 1/4" for inside wire
Wiring	Network wire-24 AWG solid, plug cable wire-26 AWG stranded
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling °F (°C)	30 day cycling from -40 to +140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from +40 to +140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40)
Drop Test °F (°C)	-40 (-40)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 inch flame test
Chemical Resistance	30 Days at 100 °F and 95% RH, subject to:
	CRC226 water displacement lubricant, WD40 water
	displacement lubricant, 4353 ant and wasp spray,
	3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (cm)	8.00 x 8.63 x 3.00 (20.32 x 21.92 x 7.62)



Grommeted Entrances



SNI®-4600 Network Interface Device



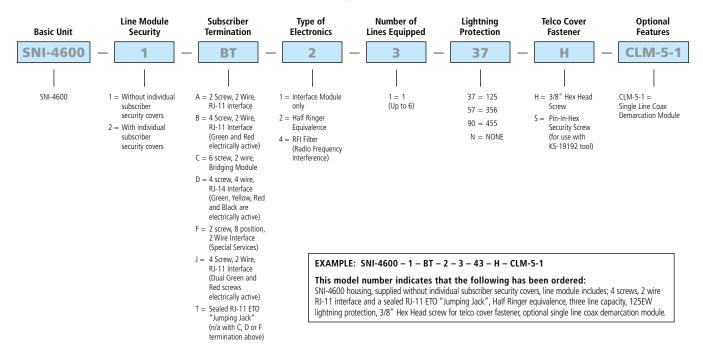
Lock Staple/Telco Override

A view of both the telco and subscriber locking mechanisms. The subscriber can access the unit with a standard screwdriver and a stainless steel lock staple is provided for individual security. Telco override is provided and can be accessed with a standard 216 tool (security fastener option also available).

Standard Configurations

MODEL NO.	AFL NO.
SNI-4600 - 1 - J - 1 - 1 - 90 - H	DM000116
SNI-4600 - 1 - B - 1 - 1 - 37 - H	DM000002
SNI-4600 - 1 - B - 1 - 2 - 37 - H	911226-00-00
SNI-4600 - 1 - B - 1 - 6 - 37 - H	911142-00
SNI-4600 - 1A - 1 - 1 - 37 - H - CLM - S - 1	912436-00-00

Custom Order Matrix (consult customer service for availability)









Three Line Configuration



Subscriber Compartment Grommets

ML-6 Indoor Network Interface Device

The ML-6 is a compact six-line Indoor Network Interface Device. The ML-6 incorporates the standard Line Module footprint. The ML-6 is decorative in styling, allowing it to be placed in the open rather than hidden inside a closet. The ML-6 features telco and subscriber grommeted cable ports, areas for recording subscriber phone numbers and operating instructions engraved into the covers of the unit. The ML-6 comes equipped with four grommeted ports in the subscriber compartment for convenient wire routing. Three grommeted ports are provided in the telco compartment as well. This feature allows the units to be stacked vertically, ideal for those occasions where space is limited.

Features

- One to six lines, field upgradeable
- Utilizes Keptel patented standard line module footprint
- Integral network wiring bridge with optional stub cable
- Stackable design
- Side entry grommets for telco and subscriber wiring
- Decorative contoured styling

Specifications

PARAMETER	VALUE
Insulation Resistance	Minimum of 100 M Ω @ \pm 200 V DC
Series Resistance	100 mΩ maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Wire Installation Spacings	1" for drop wire, 1/4" for inside wire
Wiring	Network wire-24 AWG solid, plug cable wire-26 AWG stranded
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	7 days at 158 (70)
Temperature Cycling °F (°C)	30 day cycling from -40 to 120 (-40 to 48.88)
Temperature Cycling with Humidity °F (°C)	30 day cycling from 40 to 140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	77 (25)
Drop Test °F (°C)	77 (25)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 inch flame test
Chemical Resistance	30 Days at 100 °F and 95% RH, subject to:
	CRC226 water displacement lubricant, WD40 water displacement
	lubricant, 4353 ant and wasp spray, 3% H ₂ SO ₄ , 0.2N NaOH,
	Kerosene, 10% Igepal CO-630
Paint Intrusion	NID shall not be susceptible to paint intrusion
Dimensions (H x W x D) in. (cm)	7 x 6 x 2.5 (17.78 x 15.24 x 6.35)

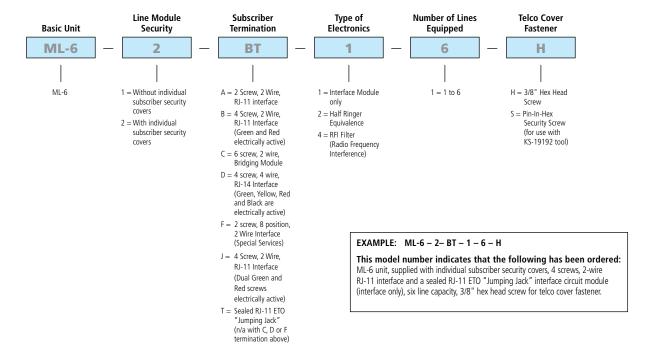


ML-6 Indoor Network Interface Device

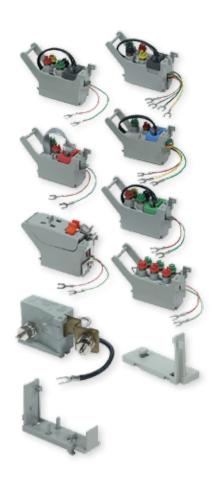
Standard Configurations

MODEL NO.	AFL NO.
ML-6 - 1 - B - 1 - 1 - H	912047-00-00

Custom Order Matrix (consult customer service for availability)







Line Modules for Network Interface Devices

The strength of the Network Interface Device (NID) product line lies in our versatile family of Line Interface Modules. The standard Line Interface Module footprint has been an integral part of the NID market for years with millions of NIDs have been deployed throughout the country.

Features

- Field upgradeable
- Standard line module footprint
- Self-contained, simply press in place
- Available with half ringers and RFI filters
- Line modules used in: SNI®-4600, SNI-4300, SNI-4600XL, ML-6 and SNI-1212
- Optional individual subscriber security cover available
- UL® Listed in Keptel® Network Interface Systems and Closures

Specifications

PARAMETER	VALUE
Contact Construction	50 micro inches hard gold / 100 micro inches nickel plated phosphor bronze
Contact Force	Minimum 100 grams
Temperature Cycling with Humidity	30 day cycling from 40° to 120°F (4.44° to 48.88°C) with 90% RH
Sealed Line Module	
Immersion (Flooded Conditions)	RJ-11 jack immersed in a solution of 1% weight sodium chloride (NaCl) and distilled deionized water, placed at a depth of 12 inches, or at a temperature of 77 °F for a period of three days. A bias of -48 V dc was applied between tip and ring of the jack during immersion
Coax Module	
Impedance	75 Ω
Insertion Loss	≤ 0.12 dB maximum, 5 MHz-1 GHz
Return Loss	≤ 21 dB minimum, 5 MHz-1 GHz
"F" Connector	Meets SCTE specification IPS-SP-400
Coax Cable	Conforms to MIL-C-17/94F specification
RF Shielding	100 dB, 5 MHz to 1 GHz, tested per MIS-20097D

Standard Configurations

MODEL NO.	AFL NO.
Kit, Upgrade 1B-1 / 125 Protector	DM000003
Kit, Upgrade 1B-1	90829
Kit, Bunch Block	911322-00-00
CLM-5 Coax Line Module	91979-01
Kit, Upgrade 1-J-1	DM000119



Line Modules for Network Interface Devices

Typical Configurations



2BT-1 Module (Sealed Module)



1A-4 Module (RFI Filter Module)



2B-1 Module (Security Cover)



1D-1 Module (RJ-14 Module)



1C-1 Module (Bunch Block)



CLM-5-1 Module (Coax Module)

Consult customer service for ordering information.

Custom Order Matrix (consult customer service for availability)

Line Module

Security

2 1 = Without individual subscriber security covers 2 = With individual

covers

subscriber security

Subscriber Termination BT

A = 2 Screw, 2 Wire, RJ-11 interface B = 4 Screw 2 Wire RI-11 Interface (Green and Red

electrically active) C = 6 screw, 2 wire, Bridging Module

D = 4 screw, 4 wire, RJ-14 Interface (Green, Yellow, Red and Black are electrically active)

F = 2 screw, 8 position, 2 Wire Interface (Special Services)

J = 4 Screw, 2 Wire, RJ-11 Interface (Dual Green and Red screws electrically active)

T = Sealed RJ-11 ETO "Jumping Jack" (n/a with C, D or F termination above)

Lightning Type of Electronics Protection 37 1 = Interface Module 37=125 only 57=356 2 = Half Ringer Equivalence 90=455

4 = RFI Filter (Radio Frequency Interference)

N=NONE

EXAMPLE: 2 - BT - 1 - 37

This model number indicates that the following has been ordered:

A line module, supplied with an individual subscriber security cover, 4 screws, 2-wire RJ-11 interface and a sealed RJ-11 ETO "Jumping Jack" interface circuit module (interface only) and is supplied with a 125EW lightning protector.





1-JC-1 Customer Bridge Module



1-CC-1 Bunch Block Module



"S" Footprint Adapter



PTD Adapter

IDC Line Modules for Network Interface Devices

Gel-filled Insulation Displacement Connector (IDC) line modules build on AFL's tradition of providing the most versatile selection of line modules. Based on the standard "K" footprint, IDC line modules provide the extra protection for connections in the most demanding conditions.

Features

- Field upgradeable
- Standard "K" footprint for use in SNI®-4300, SNI-4600, SNI-4600XL, ML-6, and SNI-1600
- Adapter DM000484 available for "S" footprint, SNI-730, SNI-760, and SNI-2900
- Self contained; simply press in place
- Available with half ringers and RFI filters
- UL[®] listed for AFL systems and closures

Specifications

PARAMETER	VALUE
Contact Construction	50 micro inches hard gold / 100 micro inches nickel plated phosphor bronze
Contact Force	Minimum 100 grams
Temperature Cycling with Humidity	30 day cycling from 40-120°F (4.44-48.88°C) with 90% RH
Sealed Line Module	RJ-11 jack immersed in a solution of 1% weight sodium chloride (NaCl)
Immersion (Flooded Conditions)	and distilled deionized water, placed at a depth of 12 inches, or at a
	temperature of 77 °F for a period of three days. A bias of -48 VDC was
	applied between tip and ring of the jack during immersion.

Standard Configurations

MODEL NO.	AFL NO.
1-JC-1, Customer Bridge Module	DM000594
1-CC-1, Bunch Block Module	DM000600
Adapter for "S" footprint NIDs (SNI-730, SNI-760 & SNI-2900)	DM000484
Adapter for PTD NIDSE	DM000717







CAC Line Module Adapter

Features

- Single width line module footprint is space efficient
- Environmentally sealed
- Same splitter used with adjunct box applications reduces inventory
- Installs in a variety of NIDs
- Quick mounting capability in front of or behind existing indoor wall jacks without drilling mounting holes or replacing existing phone jack
- Low voice band insertion loss and flat voice band attenuation distortion
- Compatible with both CAP and DMT
- Meets the ANSI T1.413 Annex E, ITU-T 992.1 Type 2 North American and Telcordia® requirements
- UL[®] 1863 Listed

LPF-200 Series ADSL POTS Splitters

AFL's line of ADSL NID POTS Splitter solutions meets most indoor and outdoor requirements for single-line applications. Packaged in the standard Line Module footprint, we have developed a solution that easily fits into most NIDs as a CPE device. The module occupies only one position within the NID and is housed in a plastic shell and encapsulated to provide an environmentally sealed product. All direct inside wiring connections to the module interface to colored, plastic coated washer screws.

Specifications

PARAMETER	VALUE
DC Loop Current (mA)	0-10
DC Resistance (Ω)	≤ 19
Insertion Loss (1004 Hz)	0.5 dB maximum; 0.2 dB typical (ZTc @ 900, ZTr @ 600)
Attenuation Distortion	±0.2 dB; 200-3400 Hz (ZTc @ 900, ZTr @ 600)
(Relative to Loss @ 1004 Hz)	±0.3 dB; 200-4000 Hz (ZTc @ 900, ZTr @ 600)
Delay Distortion	< 85 mSec from 200-4000 Hz
Return Loss (Voice Band)	13 dB ERL; 10 dB SRL-Low; 14 dB SRL-High
Longitudinal Balance; Two Port Technique	> 80 dB; 200-2 kHz , 0-30 mA
	> 60 dB; 2-4 kHz , 0-30 mA
Tip-to-Ring Capacitance (POTS Port)	< 100 nF; 20-30 Hz
ADSL Band Attenuation	> 65 dB; 25-1104 kHz
Input Impedance (ADSL Band Signal Path Loading)	0.1 dB from 30-1104 kHz
Operating Temperature °F (°C)	
LPF-200, LPF-200D	-40 to 158 (-40 to 70)
LPF-200W, LPF-200F	32 to 158 (0 to 70)
Relative Humidity (Non condensing)	0-95%
Fault Current Immunity	Complies to GR-1089 levels I & II Surge and Power Cross
Dimensions (H x W x D) in. (cm)	
LPF-200	2.05 x 0.98 x 2.20 (5.21 x 2.49 x 5.59)
LPF-200D	0.83 x 1.35 x 1.80 (2.11 x 3.43 x 4.57)
TA-230	2.50 x 3.82 x 5.45 (6.35 x 9.70 x 13.84)
Weight lbs. (kg)	0.45 (0.07)
LPF-200	0.16 (0.07)
LPF-200D	0.13 (0.58)
TA-230	0.30 (0.14)

NOTE: In-line Micro Filter and Central Office POTS Splitters are available; Contact your sales representative for ordering information

Ordering Information – Standard Configurations

DESCRIPTION	AFL NO.
LPF-200 ADSL POTS Splitter	911929-00-01
TA-230 Adjunct Box w/ LPF-200 POTS Splitter	911986-00-02
CAC Line Module Adapter (100 per bag)	911996-00-01

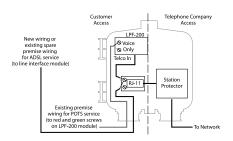


LPF-200 Series ADSL POTS Splitters

LPF-200

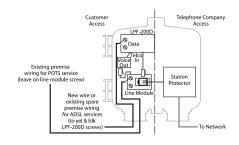


- For installation on the CPE side of NID single width line module package
- Flying leads permit universal connection to any style line module
- Multiple home runs are terminated through four washer screw handoffs
- Fits into SNI®-4300, SNI-4600, ML-6, TA™-230 and Siecor® CAC-7600 NIDs



LPF-200D (consult customer service for availability)

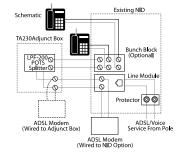
- For installation on the CPE side of NID single width line module package
- RJ-11 terminated cable interfaces for quick installations; simple enough for a customer to complete installation
- I/W homeruns remain undisturbed on the line module terminal screws during installation or removal
- Fits into SNI-4300, SNI-4600, ML-6, TA-230 and Siecor® CAC-7600 NIDs



TA-230 adjunct box



- Weathertight enclosure used when no open positions are available in NID
- Supports LPF-200 or LPF-200D POTS Splitter Module, eliminates need to inventory unique Adjunct Box Splitter
 - Bunch Block (Optional)
- Wall or Pole mountable
- Available empty or with the LPF-200/ LPF-200D Module installed and terminated to screw bosses







Benefits

- 25-pair network interface
- Optional remote half ringer electronics
- Rugged thermoplastic alloy housing
- 50-pin connector or optional 66-type punchdown on network side
- Multi-washer screws on subsciber side
- Field replaceable wiring bridges
- Stack units vertically

SNI®-2125 25-Pair Network Interface Device

The SNI-2125 is a compact Network Interface Device (NID) designed for 25-pair indoor applications. Constructed of a thermoplastic alloy and the highest quality components, the SNI-2125 is designed to provide years of uninterrupted service. The SNI-2125 is provided with a male 50-pin connector for the network connection (66-type punchdown clips are optional) and press-fit wiring bridges featuring multi-washer screws on the subscriber side. The SNI-2125 can be stacked vertically for greater than 25-pair appli-cations. The unit is available without the subscriber wiring bridges for use as a 50-pin to RJ-11 adapter or patch block.

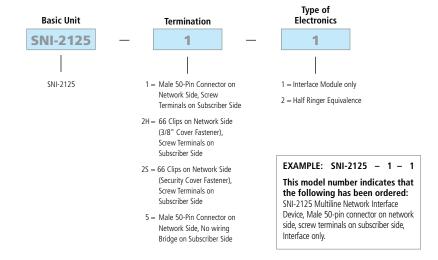
Specifications

PARAMETER	VALUE
Construction	Precision injection-molded from rugged engineering thermoplastic
Plugs and Jacks	50 micro inches of hard gold over 100 micro inches of nickel-plated phosphor bronze
Terminal Screws	Plastic head, stainless steel 1/4" hex-slotted multi-washer (brass) screws
Mounting	Wall or backboard via mounting feet
Dimensions (H x W x D)	16.25" x 5.13" x 1.63"

Standard Configurations

MODEL NO.	AFL NO.
SNI-2125	Consult customer service

Custom Order Matrix (consult customer service for availability)









25-Pair Rear Connector

SNI®-8925 Multiline Network Interface Device

The SNI®-8925 is a patented, ultra-compact, economical, Network Interface Device (NID) designed for 25-pair multiline applications. Twenty-five individual RJ-11 jacks provide the interface at the demarcation point as specified in FCC Part 68 requirements, allowing testing at the subscriber's location for each individual feeder pair provided. This line testing feature could reduce T&M charges on maintenance calls, since the subscriber would now be able to test their own individual lines to determine which side of demarc the fault resides before calling for service.

Benefits

- Mounts anywhere a 66M block would
- Compact 25-pair network interface
- Optional remote half ringer test electronics
- Rugged thermoplastic alloy housing
- Telco termination: 50-pin or AT&T 710 connector on back
- Subscriber termination: screw, IDC, 66-clip
- Mounts to 89B or 89D bracket
- Optional weatherable version for use in BET/NIDs
- UL® listed and patented (No. 4,932,051)/Telcordia® tested
- Integral I/W strain relief for each individual pair

Specifications

PARAMETER	VALUE
Construction	Precision injection-molded from rugged engineering thermoplastic
Plugs and Jacks	50 micro inches of hard gold over 100 micro inches of nickel-plated phosphor bronze
Terminal Screws	Plastic head, stainless steel 1/4" hex-slotted multi-washer (brass) screws
Insulation Displacement Connectors (66 clip and Snap-lock IDC)	Tin plated over phosphor bronze
Mounting	Frame, wall or backboard using attached standard 89D or 89B brackets (order without mounting bracket if bracket exists)

Standard Configurations

MODEL NO.	AFL NO.
SNI-8925 - 1 - 1 - 1	90365-02
SNI-8925 - 7 - 1 - 2	91669-00



SNI®-8925 Multiline Network Interface Device



Multi-Washer Screws



Snap-Lock IDC



Snap-Lock IDC



MPOP Rack

Multi-Washer Screws

- Two screws with four washers each allow the termination of up to four wires per screw
- Plastic 1/4" slotted hex heads prevent accidental casual contact from the subscriber
- Optional weather resistant rubber boots cover RJ-11 jacks for outdoor applications

Snap-Lock IDC

- Individual pairs can be terminated to the SNI-8925 without the use of hand tools
- Swinging cover makes the connection when closed by pushing conductors into contacts
- The Snap-Lock IDC is for indoor use only

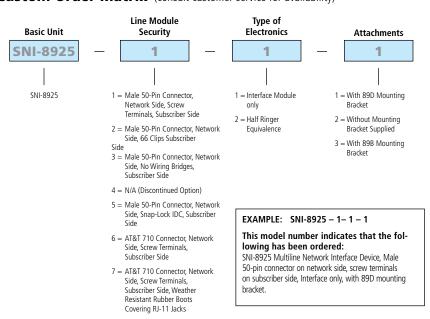
66 Style Clip

- Dual 66-clips allow termination of up to two wires per clip
- Uses the same tool as traditional 66 style blocks
- Recommended for quick cross-connect capability when used with 66 blocks
- The 66 style clip is recommended for indoor use only

MPOP demarcation system

- Mounted on guick connect type racks
- 300-2400 pair applications requiring demarcation located at minimum point of penetration
- Anywhere floor and wall space are a premium
- Preterminated stub cables on network side reduce installation time by as much as 50%
- Each system 100% pretested to eliminate troubleshooting on the job site

Custom Order Matrix (consult customer service for availability)







EOC Splitters

Ethernet Over Coax Splitters provide dual use of your home coax network. By allowing for extended operation below 5MHz, EOC splitters can be used to operate home Ethernet-based networks such as HPNA, while allowing for regular CATV service.

Features

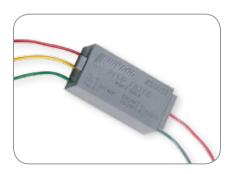
- Standard F connector 3/8"-32 UNF
- Rugged die-cast construction with universal screw mounting points
- Available in 1x2, 1x3, 1x4, and 1x6 port configurations (in x out)
- Pass TVRF frequencies between 600-700 MHz with less than 17 dB insertion loss between any two ports
- Shielded encasements with capacity to provide >110 dB EMI isolation
- Port-to-port insertion loss from 100 kHz to 200 MHz <8 dB for a 1x2; 10 dB for a 1x3;
 12 dB for a 1x4; or 15 dB for a 1x6 configuration
- Designed to handle average full-band signal levels of 0 dBm/Hz, and peak signal level of +10 dBm/Hz without component saturation or distortion
- Packaged in an EMI shielded case with 110 dB EMI isolation against signal ingress

Specifications

PARAMETER	VALUE	
DC Power	0.25 W Maximum	
Pass Frequencies	100 kHz to 700 MHz with a flat port-to-port insertion loss profile (±10% from 100kHz to 200 MHz; ±20% above or below this band)	
Port Impedance	$60 \pm 5 \Omega$	
Return Loss	> 12 dB from 100 kHz to 200 MHz > 10 dB from 200 MHz to 700 MHz	
Operating Environment (system ambient)	Temperature: -20°C to 85°C Altitude: -197 to 7000 feet Relative Humidity: 5% to 100% non-condensing MWB: 23°C	
Shipping and Storage Environment	Temperature: -20°C to 85°C Relative Humidity: 5% to 100% MWB: 29°C	

MODEL NO.	AFL NO.
1x2 EOC Splitter	DM000372
1x3 EOC Splitter	DM000373
1x4 EOC Splitter	DM000374
1x6 EOC Splitter	DM000375





Features

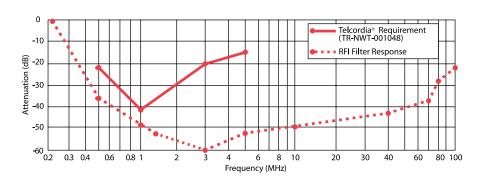
- Suppresses RF interference across AM, FM, CB, VHF, TV, Amateur and UHF band
- Maximum suppression occurs in the AM band
- Bypasses unwanted RF energy to earth ground
- Excellent balance between Tip and Ring
- Eliminates all common mode and differential mode RF interference
- Designed for use in outdoor or indoor Network Interface Devices at the customer premise
- Transparent to normal loop signaling and test voltages

Radio Frequency Interference Filter (RFI)

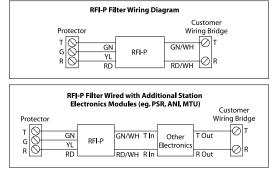
The Radio Frequency Interference Filter (RFI-P) is customer premise installed inside the Station Network Interface. It is designed to block unwanted RF energy as well as bypass RF energy to earth ground, while remaining transparent to normal loop signaling and test voltages. Using the earth ground connection, this filter acts like a drain: providing a path to ground for the RF energy to bleed off the phone line from both the network and customer side of the network interface. It effectively eliminates all common mode and differential mode RF interference induced on the phone line in the vicinity of the RFI-P filter.

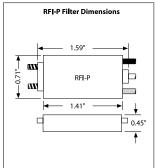
Laboratory Testing

Laboratory results presented here demonstrate that the RFI-P Filter introduces greater attenuation over a broader bandwidth when compared to the Telcordia® requirement.



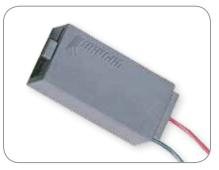
Block Diagram / Connections / Dimensions





DESCRIPTION	MODEL NO.	AFL NO.
RFI Circuit – Environmentally encapsulated with spade ended wire leads	RFI-P	90931





HR-100

1B-2 Module



HR-66T

Half Ringer Equivalent Circuit

The Half Ringer Equivalant Circuit allows automatic or manual testing to be performed from the central office without interrupting service to the customer. The Half Ringer, when connected in parallel with the phone line, poses a 0.5 REN load. The Half Ringer is available in three different packages for both indoor and outdoor use and can be used in a variety of applications. Factory installation in a number of Network Interfaces Devices is available, please consult Customer Service for specifics.

Features

- Available in a variety of packaging
- 0.5 Ringer Equivalance
- Installed parallel to the line
- Versions available for indoor or outdoor (ruggedized) use

DESCRIPTION	MODEL NO.	AFL NO.
Half Ringer installed in a ruggedized thermoplastic shell,	HR-100	90462
installs easliy in Network Interface units for outdoor use		
Half Ringer installed in a standard footprint two-wire line module	1B-2	90830-01
for use in Network Interface Devices		
Half Ringer packaged to retrofit onto a 66-type punchdown block,	HR-66T	911338-00-00
provides bridged test points		







CableGuard 500 Coax Demarcation Enclosure

The CableGuard (CG) 500 Coax Demarcation Enclosure provides a secure compartment for terminating coax, and mounting any combination of splitters and/or a ground blocks. Constructed of a weather-resistant/high impact thermoplastic alloy, the hinged cover design allows easy access while the self-sealing individual entrance ports prevent water and insects from entering. The organized mounting arrangements not only create a standardized method for high quality drop installations, but also allow future expandability for broadband equipment.

Features

- Weather-resistant/high impact thermoplastic alloy
- Self-latching, hinged cover design allows easy access without loose parts
- Organized internal mounting bosses create a standardized mounting arrangement
- Conduit ready knock-out on base
- Snap close cover with padlock and 3/8" hex head fastener; other lock options also available
- Self-sealing individual entrance ports prevent water and insects from entering the NID
- Custom logo area

Specifications

PARAMETER	VALUES	
Dielectric Strength	Minimum 2500 Vrms for 1 minute	
Torque (mounting bosses)	20 in./lbs.	
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)	
Temperature Cycling with Humidity °F (°C)	150 day cycling from 40 to 140 (4.44 to 60) with 95% RH	
Impact Test °F (°C)	-40 (-40), 5 ft./lbs. on all external surfaces	
Drop Test °F (°C)	-40 (-40), 5 ft. onto concrete surface 4 times	
Rain	24 hours at 10 psi	
UV Resistance (Days Exposed)	60 per ASTM-G26-84	
Salt Fog (Days Exposed)	60 per ASTM-BLL7-90	
Flammability	UL94-5V	
Chemical Resistance	30 Days at 100°F and 95% RH Resists chipping and/or cracking when subject to: house paint, wasp spray, sulfuric acid, kerosene and sodium hydroxide	
Material	UL® listed flame retardant thermoplastic alloy	
Dimensions (H x W x D) in. (cm)	6.5" x 8.0" x 2.75" (16.5 x 20.3 x 7.0)	
Cable Entrances in. (cm) diameter - input Cable Entrances in. (cm) - output	1 x 0.625 (1.5) + 1 x 0.25 (0.6) ground wire 2 x 0.625 (1.5)	
Covers	Molded-in snap finger and 3/8" hex head fastener	

MODEL NO.	AFL NO.
CG-500	DM000572-CG







CG-1000 open



CG-1000XL

CableGuard 1000 and 1000XL Coax Demarcation Enclosures

The CableGuard (CG) 1000 and CG-1000XL Coax Demarcation Enclosures provide a secure compartment for terminating coax, and mounting splitters and/or a ground blocks. Constructed of a weather-resistant/high impact thermoplastic alloy, the hinged cover design allows easy access, while the self-sealing individual entrance ports prevent water and insects from entering. The organized mounting arrangements not only create a standardized method for high quality drop installations, but also allow future expandability.

Features

- Weather-resistant/high impact thermoplastic alloy
- Self-latching, hinged cover design allows easy access without loose parts
- Organized internal mounting bosses create a standardized mounting arrangement and allow for proper bend radius of coax cable up to RG-6
- Upgradeable/separate secure subscriber compartment
- Upgradeable telephony demarcation
- Self-sealing individual entrance ports prevent water and insects from entering
- Optional custom logo
- Optional secure ground block protection

Specifications

PARAMETER	VALUES	
Dielectric Strength	Minimum 2500 Vrms for 1 minute	
Torque (mounting bosses)	20 in./lbs.	
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)	
Temperature Cycling with Humidity °F (°C)	150 day cycling from 40 to 140 (4.44 to 60) with 95% RH	
Impact Test °F (°C)	-40 (-40), 5 ft./lbs. on all external surfaces	
Drop Test °F (°C)	-40 (-40), 5 ft. (152.4 cm) onto concrete surface 4 times	
Rain	24 hours at 10 psi	
UV Resistance (Days Exposed)	60 per ASTM-G26-84	
Salt Fog (Days Exposed)	60 per ASTM-BLL7-90	
Flammability	UL94-5V	
Chemical Resistance	30 Days at 100°F and 95% RH, Resists chipping and/or cracking when subject to: house paint, wasp spray, sulfuric acid, kerosene and sodium hydroxide	
Material	UL® listed flame retardant thermoplastic alloy	
Dimensions (H x W x D) in. (cm) CG-1000 CG-1000XL	9.00 x 9.00 x 3.00 (22.80 x 22.80 x 7.60) 9.00 x 9.00 x 5.25 (22.80 x 22.80 x 13.34)	
Cable Entrances in. (cm) diameter - Output	5 x 0.625 (1.5)	
Cable Entrances in. (cm) diameter - Input	1 x 0.625 (1.5), 1 x 0.250 (0.6) (ground wire)	
Covers	Molded-in snap finger and or 3/8" hex head fastener and F term	

MODEL NO.	AFL NO.
CG-1000	92188-00-00
CG-1000 with 3/8" heax head fastener	92405-00-00
CG-1000XI	DM000336







CG-1500 open

CableGuard 1500 Coax Demarcation Enclosure

The CableGuard (CG) 1500 Coax Demarcation Enclosure provides a secure compartment for terminating coax, and mounting any combination of splitters and/or a ground blocks. Constructed of a weather-resistant/high impact thermoplastic alloy, the hinged cover design allows easy access while the self-sealing individual entrance ports prevent water and insects from entering. The organized mounting arrangements not only create a standardized method for high quality drop installations, but also allow future expandability for broadband equipment.

Features

- Weather-resistant/high impact thermoplastic alloy
- Self-latching, hinged cover design allows easy access without loose parts
- Organized internal mounting bosses create a standardized mounting arrangement and allow for proper bend radius of coax cable up to RG-6
- Upgradeable telephony demarcation
- Self-sealing individual entrance ports prevent water and insects from entering the NID
- Optional custom logo
- Optional secure ground block protection
- 2 prewire knockouts

Specifications

PARAMETER	VALUES
Dielectric Strength	Minimum 2500 Vrms for 1 minute
Torque (mounting bosses)	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling with Humidity °F (°C)	150 day cycling from 40 to 140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40), 5 ft./lbs. on all external surfaces
Drop Test °F (°C)	-40 (-40), 5 ft. (152.4 cm) onto concrete surface 4 times
Rain	24 hours at 10 psi
UV Resistance (Days Exposed)	60 per ASTM-G26-84
Salt Fog (Days Exposed)	60 per ASTM-BLL7-90
Flammability	UL94-5V
Chemical Resistance	30 Days at 100°F and 95% RH Resists chipping and/or cracking when subject to: house paint, wasp spray, sulfuric acid, kerosene and sodium hydroxide
Material	UL® listed flame retardant thermoplastic alloy
Dimensions (H x W x D) in. (cm)	12.25 x 12 x 5.25 (31.10 x 30.50 x 13.30)
Cable Entrances in. (cm) diameter - Output	5 x 0.625 (1.5)
Cable Entrances in. (cm) diameter - Input	2 x 0.750 (1.9), 1 x 0.650 (0.6) (ground wire)
Covers	Molded-in snap finger and or 3/8" hex head fastener and F term

MODEL NO.	AFL NO.
CG-1500 - F term fastener	DM000553-CG
CG-1500 - 3/8" hex head fastener	DM000500





CableGuard 2000 Coax Demarcation Enclosure

The CableGuard (CG) 2000 Coax Demarcation Enclosure provides a secure compartment for terminating coax, and mounting any combination of splitters and/or ground blocks. Constructed of a weather-resistant/high impact thermoplastic alloy, the hinged cover design allows easy access while the self-sealing individual entrance ports prevent water and insects from entering. The organized mounting arrangements not only create a standardized method for high quality drop installations, but also allow future expandability for broadband equipment.

Features

- Self-sealing individual entrance ports
- Internal mounting bosses create a standardized mounting arrangement
- Optional custom logo

- Self-latching, hinged cover design allows easy access without loose parts
- Vertical splitter mounting plate available
- Weather-resistant/high impact thermoplastic alloy



Specifications

PARAMETER	VALUES
Dielectric Strength	Minimum 2500 Vrms for 1 minute
Torque (mounting bosses)	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling with Humidity °F (°C)	150 day cycling from 40 to 140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40), 5 ft./lbs. on all external surfaces
Drop Test °F (°C)	-40 (-40), 5 ft. (152.4 cm) onto concrete surface 4 times
Rain	24 hours at 10 psi
UV Resistance (Days Exposed)	60 per ASTM-G26-84
Salt Fog (Days Exposed)	60 per ASTM-BLL7-90
Flammability	UL94-5V
Chemical Resistance	30 Days at 100°F and 95% RH Resists chipping and/or cracking when subject to: house paint, wasp spray, sulfuric acid, kerosene and sodium hydroxide
Material	UL® listed flame retardant thermoplastic alloy
Dimensions (H x W x D) in. (cm)	13.0 x 9.0 x 3.0 (33.00 x 22.80 x 7.60)
Cable Entrances in. (cm) diameter - Output	8 x 0.500 (1.2)
Cable Entrances in. (cm) diameter - Input	2 x 0.625 (1.5), 1 x 0.250 (0.6) (ground wire)
Covers	3/8" hex screw or pin-in-hex security fastener

MODEL NO.	AFL NO.
CG-2000 with Hexhead Cover Fastener	92393-00-00







OPE-92000 Coax Demarcation Enclosure

The OPE-92000 Coax Demarcation Enclosure provides a secure compartment for terminating coax, and mounting any combination of splitters and/or a ground blocks. Constructed of a weather-resistant/high impact thermoplastic alloy, the hinged cover design allows easy access while the self-sealing individual entrance ports prevent water and insects from entering. The organized mounting arrangements not only create a standardized method for high quality drop installations, but also allow future expandability for broadband equipment.

Features

- Isolated customer access compartment enables the customer to run extensions while preventing access to the broadband provider compartment
- Weather-resistant/high impact thermoplastic alloy
- Self-latching, hinged cover design allows easy access without loose parts
- Organized internal mounting bosses create a standardized mounting arrangement and allow for proper bend radius of coax cable up to RG-6
- Self-sealing individual entrance ports prevent water and insects from entering the NID

Specifications

PARAMETER	VALUES	
Dielectric Strength	Minimum 2500 Vrms for 1 minute	
Torque (mounting bosses)	20 in./lbs.	
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)	
Temperature Cycling with Humidity °F (°C)	150 day cycling from 40 to 140 (4.44 to 60) with 95% RH	
Impact Test °F (°C)	-40 (-40), 5 ft./lbs. on all external surfaces	
Drop Test °F (°C)	-40 (-40), 5 ft. (152.4 cm) onto concrete surface 4 times	
Rain	24 hours at 10 psi	
UV Resistance (Days Exposed)	60 per ASTM-G26-84	
Salt Fog (Days Exposed)	60 per ASTM-BLL7-90	
Flammability	UL94-5V	
Chemical Resistance	30 Days at 100°F and 95% RH Resists chipping and/or cracking when subject to: house paint, wasp spray, sulfuric acid, kerosene and sodium hydroxide	
Material	UL® listed flame retardant thermoplastic alloy	
Dimensions (H x W x D) in. (cm)	15.5 x 11.3 x 3.8 (39.30 x 28.50 x 9.50)	
Cable Entrances in. (cm) diameter - Output	5 x 0.625 (1.5)	
Cable Entrances in. (cm) diameter - Input	1 x 0.625 (1.5), 1 x 0.250 (0.6) (ground wire)	
Covers	Molded-in snap finger and locking loop	

MODEL NO.	AFL NO.
OPE-92000	92000







Terminal version



IDC version



Optional hanger brackets

Terminal Access™ TA™-1642 Terminal Enclosure

AFL's TA-1642 terminal enclosure is uniquely designed to withstand harsh environments, such as high moisture and coastal areas and meets all Telcordia requirements stipulated in GR-975 for sealing and GR-1195 for IDC Cross-connect and Terminal Blocks. The TA-1642 can be used in aerial, pole or wall mount applications and can be outfitted with heavy plated steel hangers designed to grip the support strand and prevent rotation. Internal punch-out holes allow for wall or pole mounting. Stainless steel lashing straps can be mounted through punch-outs for pole, post or piling mounting. The TA-1642 also features eight (8) individually grommeted entry/exit ports for multiple drop wire installations. The unit features a ¼ turn fastener for easy open/close access using a 216 tool (can wrench).

The IDC version of the TA-1642 is a 6-pair sealed termination device equipped with six (6) pre-installed individual IDC termination modules mounted onto a single common ground bus bracket. The bus bracket also allows common bonding of ground wire, sheath armor and/or strand wire. The IDC termination modules require no stripping of the copper wire insulation prior to connection. In addition, each module has two (2) ports for small gauge (22-24 AWG) wire terminations and two (2) ports that accept large gauge (18-19 AWG) or small gauge (22-24 AWG) wire for tip/ring connections. The ports are color coded for easy tip/ring identification. Labelling inside the cover allows for line identification of each IDC termination module along with illustrated installation instructions.

Features

Enclosure Housing

- Engineered thermoplastic weatherproof enclosure
- UV, Impact and chemical resistant
- Flame retardant
- Aerial, wall or pole/piling mounting applications
- Optional strand hanger brackets
- Quarter-turn stainless steel fastener
- Eight grommeted cable entry/exit ports
- UL[®] listed
- Craft-friendly design

Terminal Version

- An alternative to the 116 or 104 closure
- Houses 142 and 57 style protectors
- Accepts AFL, AT&T and Reliable terminal blocks
- Available with binding post, IDC or gas tube protection.

IDC Version

- Individual gel-sealed IDC termination modules pre-installed
- 18-24 AWG copper wire termination

DESCRIPTION	MODEL NO.	AFL NO.
TA-1642 Terminal Enclosure with #90313 Terminal Block (6-Pair)	1642-1-34	90379
TA-1642 Terminal Enclosure with six 125-style Gas Tube Protectors	1642-1-37	DM000124
TA-1642 Hanging Hardware Kit (for 5/16" to 7/16" strand)	1642 Hanging Hardware	90323
TA-1642 IDC Terminal Enclosure	1642 IDC	DM000254
TA-1642 Hanger Bracket Kit (for 5/16" to 7/16" strand)	1642 Hanging Hardware Kit	90323







The TA-1642XL termination enclosure can be outfitted with heavy plated steel hangers designed to grip the support strand and prevent rotation. Internal punch-out holes allow for wall or pole mounting. Stainless steel lashing straps can be mounted through punch-outs for pole, post or piling mounting.

Features

- An alternative to the 116 or 104 closure
- Corrosion and weatherproof
- Pole or wall mountable
- Quarter-turn stainless steel cover fastener
- Eight grommeted cable entry/exit ports
- Houses 142 and 57 style protectors
- Accepts AFL, AT&T and Reliable terminal blocks
- Impact and chemical resistant engineered thermoplastic



DESCRIPTION	MODEL NO.	AFL NO.
TA-1642XL enclosure, empty, no strand hanging	1642XL	912809-00-00
hardware included		
TA-1642 Hanging Hardware Kit (for 5/15" to 7/16" strand)	1642 Hanging Hardware Kit	90323





Terminal Access™ TA™-200/205 Terminal Enclosure

The TA-200/205 is a secure environmentally protected two-pair terminal enclosure. Mounting hardware and terminal studs are included. The TA-200 enclosure features grommeted openings and a provision for a security device.

Features

- Corrosion proof and environmentally protected
- Pole or wall mountable
- Secure hinged cover design
- Grommeted cable entry/exit ports
- Impact and chemical resistant engineered thermoplastic
- Available in two configurations



TA-200

Specifications

PARAMETER	VALUE
Insulation Resistance	Minimum of 100 m Ω @ \pm 200 V DC
Series Resistance	100 mΩ maximum with jacks mated
Dielectric Withstand	1000 Vrms for 1 minute
Dielectric Withstand to Mounting Surfaces	Minimum 2500 Vrms
High Current Capacity	5 amp current for 15 minutes
Cable Entrances	0.5" input, 0.5" output
Torque	20 in./lbs.
High Temperature Storage/Mold Stress °F (°C)	14 days at 159 (70.55)
Temperature Cycling °F (°C)	30 day cycling from -40 to 140 (-40 to 60)
Temperature Cycling with Humidity °F (°C)	30 day cycling from 40 to 140 (4.44 to 60) with 95% RH
Impact Test °F (°C)	-40 (-40)
Drop Test °F (°C)	-40 (-40)
Rain	UL® 1863 for 24 hours at 10 psi
Salt Fog (Days Exposed)	30
Sunshine (Days Exposed)	60
Fungus Resistance	ASTM G-21 rating of 0
Flammability	Oxygen index of 28%, UL746C 5 flame test
Chemical Resistance	
30 Days at 100 °F and 95% RH Subject to:	CRC226 water displacement lubricant, WD40 water displacement lubricant, 4353 ant and wasp spray,
	3% H ₂ SO ₄ , 0.2N NaOH, Kerosene, 10% Igepal CO-630
Dimensions (H x W x D) in. (cm)	3.13 x 3.63 x 2.5 (7.95 x 9.22 x 6.35)



TA-205

DESCRIPTION	MODEL NO.	AFL NO.
Two pair terminal closure	TA-200	911188-04
Two pair terminal closure - with ground stud	TA-205	911283-00-01





MK-216+ Can Wrench

AFL 216 Can Wrench adds more functionality then most with integral pin-in-hex/ 1/4" drive adapter, wire stripper, and drop splitter. AFL 216 Can Wrench provides one tool for your NID installation needs.

Features

- 3/8" hex wrench with longer length
- 7/16" hex wrench with longer length
- 3 size drop wire splitter
- 4 size wire stripper

Ordering Information

MODEL NO.	AFL NO.
MK-216+	DM000690



AFL Quick Wrench

MODEL NO.	AFL NO.
DI-216	DM001096

Notes

Please contact your AFL Sales Representative for information about our other products or services.

FUSION SPLICING



TEST AND INSPECTION



SPLICE CLOSURES



FIBER OPTIC CABLE



CLEANING PRODUCTS



NETWORK SERVICES



Along with a broad range of products, we also offer professional training through The Light Brigade. Over 40,000 people have completed a Light Brigade training course making us the leading fiber optic training provider in the world.





