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Netceed is a global leader in distribution, logistics, technical engineering, and product design with over 30 years of expertise and performance supporting the Fiber to the Home (FTTH), telecommunications, and broadband industries.

We supply and distribute a comprehensive portfolio of passive and active equipment and tools for network deployment, upgrades, and maintenance, and offer a range of value-added services including CPE refurbishment & repair, outsourced procurement, and logistics solutions for cable and telecom operators, network installers and their subcontractors. We have strong, long-lasting relationships with industry-leading partners around the world and are dedicated to customer satisfaction and reliability.

Netceed supports cable operators, telecommunications service providers, rural utility providers, electric cooperatives, and contractors with a full range of products and solutions for seamless delivery of high-speed Internet, video, data, and voice services to residential, business, and mobile users.

With operations across 19 countries, our team is dedicated to shaping the future of communication networks across the globe.

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Our robust portfolio powers FTTH, HFC, wireless, 5G/mobile, and data center technologies with extensive industry expertise and performance.

- Active Products
- Aerial & Underground
- Cable Assemblies
- Cables & Conduit
- Connectors
- Customer Premises
- Data Center
- FTTH & FTTx
- Hardware
- HFC
- Inside Plant
- Network Security
- Outside Plant
- Passive Products
- Software Defined Networking
- Test & Measurement
- Timing & Synchronization
- Tools, Consumables & Safety Equipment
- Traffic & Signaling
- Wireless Infrastructure



YOUR GO-TO TO GET THINGS DONE

From the Distribution Network to the Customer Premises, we have you covered with everything needed for FTTH deployment. We carry products and materials from nearly 1,500 global sourcing and supply partners, including:



LEADING THE WAY INTO THE FIBER OPTIC FUTURE, TOGETHER

Forecasting the trajectory of fiber optic technology doesn't require a crystal ball; it demands a dependable, forward-thinking partner. With FTTH's inherent scalability and compatibility with emerging technologies, careful product selection is critical for constructing resilient, high-performance network infrastructures poised for future generations.

From Optical Network Terminals (ONTs) to Optical Line Terminals (OLTs), Netceed leverages extensive expertise and personalized service to meet your unique requirements. Supported by a vast network of nearly 1,500 global sourcing and supply partners, and with over 90,000 SKUs, Netceed is your premier partner today and for the ever-changing tomorrow.

Optical Line Terminals (OLTs)



SDX 6330-48 High-density 10G Combo PON OLT

Key Features:

- 48 PON ports deliver simultaneous XGS-PON and GPON connections through a single port
- 2x200Gb Ethernet, 2x100Gb Ethernet, and 2x10/25Gb Ethernet uplinks
- Side-to-side or front-to-back airflow options
- Hardened for remote cabinet deployment

Adtran - SDX 6000 - Disaggregated OLT Family - NABALT000075

Consists of open and disaggregated access devices that support a broad range of PON standards, including 10Gb Combo PON, XGS-PON, and GPON.

Key Features:

- Built for open, vendor-neutral aligned networks
- Fits all deployment scenarios from large scale to niche applications
- Scale down to as few as 100 subscribers all the way up to 100,000
- United under a single control and orchestration platform
- Inclusive of 10Gb Combo PON, XGS-PON, and GPON variants
- Advanced Combo PON technology delivers simultaneous GPON and XGS-PON connections through a single port



Adtran - TA5000 - 10Gb Fiber Access Platform - NABALT000236

Scales up to 21,000 subscribers while providing highly scalable, integrated aggregation utilizing multiple 10GbE, 40GbE, and 100GbE interfaces.



Adtran - TA5000 8-Port 10Gb Combo PON OLT Bundle - NABALT000156

This Combo PON OLT module allows each of the eight ports to utilize multiple transceivers independently, enabling service providers to determine the right tech (GPON or XGS-PON) for residential FTTH, while also providing capacity for high-bandwidth business and mobile backhaul services.

Key Features:

- D2 optics
- Extends FTTH reach up to 37 miles simplifying broadband expansion to rural and remote locations
- Extends Gb service coverage area by 20% increasing revenue potential
- Supports multi-Gb residential, business, and mobile backhaul services
- Simplifies migration to XGS-PON with zero operational impact, additional space, or customer disruption

Supporting FTTH - The TA5000 4 & 8 Port 10Gb Combo PON OLT modules offer a cost-effective solution to provide broadband services to both residential and business customers.



Harmonic - Pier OLT Shelf

Streamlines network design to deliver high-speed internet even in hard-to-reach areas. The easily customized shelving system is a rugged, one-rack-unit device serving thousands of subscribers, working with Distributed Access Architecture Switches (DAAS) switches.



CoS@ virtual core software analytics produces critical information about the FTTH deployment, and the Pier's AI engine provides detailed insights about the health of the network.

Key Features:

- Supports XGS-PON, Combo PON, and GPON standards, offering options for new and upgraded networks
- High-power XGS-PON optics extend reach to over 37 miles
- Dual-density PON optics serve two groups from one port, reducing equipment and space needs in dense areas
- Third-party ONT & ONU support provides operators flexibility to select industry-leading in-home devices options



Wharf offers 1.6 Terabits of packet processing power and a wide array of interface types and speeds, including:

- 2 x 100/400Gb long-range ports
- 2 x 40 /100Gb flexible-use ports
- 24 x 10 /25Gb high-speed ports

Harmonic - Wharf Hardened Switch

Hardened for remote OLT applications. Delivers reliable, ultra-fast broadband speeds to high-density service areas and accelerates time to market of XGS-PON or 10Gb EPON FTTH services alongside 25/40/100Gb business-class services from outdoor cabinetry.

Key Features:

- Compatible with open networking standards for highly reliable composable networks
- Future-proof for 5G with ultra-low forwarding latency, high precision frequency and phase timing synchronizations
- Long-haul coherent optics provide connectivity at ranges up to 184 miles
- Simplified maintenance operations with redundant, hot-swappable components



Compact, modular, stackable form factor cost-effectively scales down for small remote sites and up for massive aggregation hubs.



Harmonic - FIN - 10Gb SFP+ Based OLT

A versatile and compact OLT module for fiber-to-the-anything (FTTx) applications.

Key Features:

- **Compact & Efficient** - Use 10Gb XGS/EPON optics to enable 10G PON solutions at a fraction of the cost of fixed-format OLT chassis
- **Standardized & Universal** - Integrates into commercially available Ethernet switches or other Ethernet-enabled networking equipment with SFP+ sockets to become apart of any 10Gb PON network
- **Flexible deployment** - Leverage Ethernet switch PON extension or co-location, or outside plant PON access bridge connectivity with support for variants of 10G PON and Remote PHY (R-PHY)

Optical Line Terminals (OLTs)



Uplink Ethernet Ports:

- 2 x SFP28 or 2 x cSFP28 ports: for 1 x 10Gb / 1 x 25Gb / 2 x 10Gb / 2 x 25Gb links per each port

PON Ports:

- 4 x OLT SFP+ Ports: GPON / Dual GPON / XGS / COMBO / 10Gb EPON
- Max 128 ONT per port
- Up to 8 XGS-PON ports per device

Harmonic - Pearl R-OLT - High Density Remote OLT

A high-density, compact, low-power, remote OLT enabling FTTH broadband service delivery with versatile deployment options. Hardened for deployment indoor or in outdoor enclosures to deliver broadband services economically and strategically to serve densely populated city centers and low-density rural communities.

Key Features:

- Support for GPON, XGS-PON, Combo-PON, EPON, and 10Gb EPON
- Integrated with Harmonic's virtualized broadband network gateway (vBNG), and integrates with 3rd party BNGs
- High-power, long-range optics enable extended reach from node to subscriber
- Deploy anywhere in underground vaults, compact pedestals, or in aerial configurations
- For use in underground vaults, cabinets, pedestals, or aerial configurations
- Versatile for a variety of deployments: brownfield, greenfield, rural, residential, urban, MDU



Oyster **Ripple**
The Pearl R-OLT seamlessly integrates with Harmonic's Ripple and Oyster node enclosures, and is compatible with 3rd party nodes.



The Ciena Microplug SFP+ OLT transforms data protocols into 10Gb PON. The SFP+ plugs into standard Ethernet switches and is compatible with 3rd party 10Gb ONTs.

Ciena - TXM-MPOLT-05I - 10Gb EPON/XGS-PON MicroPlug OLT

The Ciena Universal Aggregation and Access over 10Gb PON Transceiver enables service providers to quickly deploy high-bandwidth services in an agile and scalable way. Requiring less space and power than any other OLT product on the market, including very high capacity deployments. The modularity and remote management capabilities of this SFP+ OLT make it ideally suited for virtualized PON management solutions.

Key Features:

- World's only enterprise hot-pluggable 10Gb PON OLT
- SFP+ 10Gb Optical Transceiver with Embedded Universal Ethernet-to-PON MAC Bridge
- Software Configurable, Symmetric 10/10Gb Rates for XGS-PON or 10Gb EPON Protocols
- In XGS-PON Mode: Compliant With ITU-T G.9807.1 Specifications
- In EPON Mode: Compliant With IEEE802.3av, SIEPON and DPoE Specifications

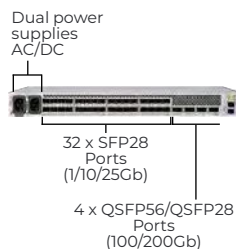
The TXM-MPOLT-5I is compatible with:

Ciena 3000 Series

- **3924:** Compact Ethernet access switch for business and mobile backhaul services
- **3926:** Versatile, small form-factor Ethernet access device with PoE capabilities
- **3928:** High-performance Ethernet access switch with advanced service capabilities
- **3984:** High-capacity Ethernet aggregation switch for metro and access networks
- **3985:** Enhanced Ethernet aggregation switch with advanced timing and synchronization features for mobile backhaul

Ciena 8000 Series

- **8114:** Versatile platform optimized for high-performance converged packet-optical networking



Compatible with Ciena's **TXM-MPOLT-05I** SFP+ OLT MicroPlug, above.

Ciena - 5164 - Network Slicing Router - NABANT000019

Built for 5Gb networks that converge 4Gb/5Gb front/mid/backhaul networks onto a common, simpler infrastructure. With dense 1/10/25Gb Ethernet to 100/200Gb Ethernet aggregation and support for both hard and soft network slicing.

Key Features:

- Cost-effective 10/25Gb Ethernet to 100/200Gb Ethernet aggregation
- 32 x 1/10/25Gb Ethernet and 4 x 100/200Gb Ethernet fixed ports
- L1/L2/L3 low latency switching
- Carrier Ethernet, IP routing, SR-MPLS, and SRv6 ready
- Hardware-assisted routing and switching OAM scaled to deliver 25Gb Ethernet services with guaranteed SLA differentiation

Ciena 5000 Series

- **5130:** Compact Ethernet access platform with 1GE interfaces
- **5131:** Compact Ethernet access platform with 10GE interfaces
- **5144:** High-density platform offering 10/100GE capabilities
- **5160:** Scalable aggregation switch
- **5164:** Aggregation switch with advanced timing features.
- **5166:** Designed for 5GE mobile backhaul
- **5171:** High-capacity platform with 10/100GE ports for large-scale applications



There are three size variants suitable for all types of fiber networks: from hundreds of subscribers on the FX-4 to thousands of subscribers on the FX-16.

Modular shelves:

- **FX-16:** 16 slots for line termination cards
- **FX-8:** 8 slots for line termination cards
- **FX-4:** 4 slots for line termination cards
- Each of the above have 2 slots for redundant network cards



FWLT-C - Universal Multi-PON Card
Supports GPON, XGS-PON, Multi-PON w/embedded functionality to support both simultaneously.

Nokia - Lightspan FX - Fiber Access Nodes

High-capacity access nodes for massive scale fiber roll-outs. The FX series supports multiple PON technologies and point-to-point services at the same time. The FX series gives you the flexibility to choose the fiber technology, deployment density and evolution strategy that best suits your technoeconomics, local regulations, and service offering.

Key Features:

- High-density GPON, XGS-PON, Multi-PON, TWDM-PON and point-to-point
- Non-blocking, high-capacity backplane of 2 x 100Gb per slot
- Supports both traditional management models
- Supports network sharing and network slicing between multiple services and/or content providers

Optical Network Terminals (ONTs)



Ciena's 3801 supports 1GbE



Ciena's 3802 supports 10GbE edge network connectivity

Ciena - 3801 & 3802 - XGS-PON Desktop ONTs

To help network operators address their customer business needs on premise, Ciena is introducing two ITU-T G.9807.1 XGS-PON compliant desktops – the 3801 and the 3802. The 3801 XGS-PON desktop will support 1GbE; and the 3802 desktop will support 10GbE edge network connectivity.

The 3801 and 3802 allow flexible, open deployment within Ciena's 10Gb PON solution to address key small to medium business/enterprise 10Gb PON market opportunities. The 3801 enables low-cost metro access to allow for maximizing ROI, while 3802 is more suited to higher applications enabled by advanced timing and capacity.

Network operators can simplify service deployment, assure performance, and decrease time to revenue, using either the 3801 or 3802 business-grade desktops.



Ciena - 3806 - XGS-PON Weatherized ONT - NABANT000019

Spec'd like the 3801/2, the 3806 weatherized ONT is engineered to accommodate direct outdoor deployments. Mountable on a pole, strand, and residential dwellings, this ONT can be easily deployed for FTTH and other applications, including Small Office, Home Office (SOHO).

Key Features:

- Small, slim, ruggedized design enables deployed in a variety of outdoor environments
- Provides a single-box solution for access, service delivery, and in-depth management
- Small direct outdoor clamshell mountable kit available



Compatible with Ciena's TXM-MPOLT-051 SFP+ OLT MicroPlug. See page 5.

Comtrend - GRG-4286 - XGS-PON ONT Gateway

An XGS-PON Gateway that enables the delivery of up to 10Gb data and/or IPTV services to residential homes. A single 10Gb Ethernet port provides a super fast and stable internet connection for ultra high bandwidth services.

Key Features:

- TiBit Certified
- Symetric 10Gb up and downstream
- 10Gb LAN with routing functionality and bridge configurable
- OMCI protocol and TR-069 Remote management



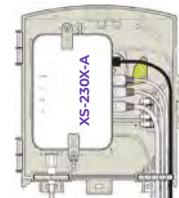
Compatible with Ciena's TXM-MPOLT-051 SFP+ OLT MicroPlug. See page 5.

Comtrend - GRG-4283 - XGS-PON VoIP ONT Gateway

Designed as a standards-based XGS-PON VoIP ONT Gateway that enables the delivery of up to 10Gb data and/or IPTV services to residential homes. A single 2.5 Gb Ethernet port provides a strong and stable internet connection for ultra high bandwidth services.

Key Features:

- Tibit Certified
- Future-proof with the new XGS-PON standard that can co-exist with existing GPON and is capable of delivering symmetric 10Gb speeds
- Deliver ultra-fast speeds that enable the highest bandwidth applications - AR/VR, over the top video, and Cloud gaming
- Offer higher-priced residential broadband speeds enabled by XGS-PON deployments



ONT mounted inside the universal SFU ONT outdoor enclosure

Nokia - XS-230X-A - ONT with 10Gb Ethernet

Designed to deliver triple play services in an FTTH environment to single family units where multiple Ethernet and voice ports are required. The Nokia ONT terminates the XGS-PON fiber interface that is compliant with a Full Service Access Network (FSAN).

Key Features:

- 1 x 10Gb Ethernet, 2 x Gb Ethernet, and 2 x POTS ports
- Temperature-hardened ONT for outdoor and indoor deployments
- For outdoor deployment, this ONT should be mounted in a Nokia universal SFU ONT enclosure.

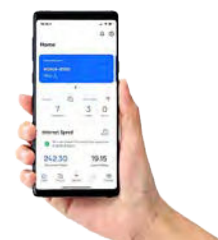


Nokia - XS-2537X-B - XGS-PON Tri-Band Gateway

Where multiple Ethernet and voice ports are required, a single unit can cover up to 3,500 sq. ft., and is designed to deliver triple play services to create a single network in a large or multi-story house with the ability to connect up to five mesh extenders via Ethernet or WiFi.

Key Features:

- XGS-PON uplink (10Gb symmetrical)
- Up to 19Gb in the home over true tri-band WiFi 7
- 1x10 and 3x1 Gb LAN ports
- 4x4 MIMO on 2.4 GHz, 5 GHz and 6 GHz
- Extend coverage with up to five Beacons
- TR-369 compatible



Easy to install and manage using the Nokia mobile app

Optical Network Terminals (ONTs)



Nokia - XS-2426X-A - ONT & Residential Gateway

For home networking delivering 10Gb symmetrical XGS-PON with built-in concurrent dual-band WiFi networking and triple play capabilities. The ONT supports WiFi EasyMesh™, to create a whole home mesh network. This coverage can be expanded at any time by installing additional WiFi EasyMesh-capable beacons to ensure seamless roaming throughout the home.

Integrated ports:

- 3 x RJ-45 10M/100M/1G auto-negotiating interfaces
- 1 x RJ-45 100M/1G/2.5G/5G/10G auto-negotiating interface
- 2 x POTS ports for carrier-grade voice services
- Dual-band concurrent WiFi: 2.4GHz and 5GHz
- One USB 3.0 host port

Key Features:

- Supports application containers, that allow introducing new services, from cybersecurity to entertainment to productivity
- Corteca Device Software creates a selfhealing, self-optimizing network and includes intelligent channel selection, band steering, client steering and backhaul management



Adtran - 452 - SFU Outdoor ONT - NABANT000017

Designed to address the residential market with industry-leading voice, data, and video capabilities. Data services are delivered over 10/100/1000Base-T Ethernet interfaces. Telephone service is supported by RJ-45 POTS interfaces.

Key Features:

- Environmentally hardened for indoor and outdoor deployments
- Full Class B+ Optics, capable of 18.6 mile reach
- Optional internal Opti-fit mounting
- Fiber cable management
- Supports both VoIP and Time Division Multiplexing voice protocols
- Supports both GPON and Active Ethernet deployment models
- Provides Class of Service (CoS) levels for prioritizing multi-user services



Adtran - SDX 601QV - GPON SIMPLE ONT - NABANT000061

Features a 2.5Gb Ethernet LAN interface for delivering premium multi-gigabit services. It also includes one POTS port that supports carrier-grade VoIP.

Key Features:

- Delivers cost-effective converged residential and business services
- Zero-touch service provisioning eliminates truck rolls

Adtran - SDX 630 Series - Multi-Gb XGS-PON ONTs

10Gb symmetric XGS-PON ONTs are designed to address the demands of residential and business customers. The flexible, open technology provides a cost-effective path to high bandwidth services while supporting existing FTTP subscribers. The SDX 630 Series meets all connectivity needs, from streaming high-quality videos on multiple devices to running data-intensive cloud applications. The low-power devices are easy to deploy and feature zero-touch service provisioning capabilities.

Key Features:

- Low-power, easy to deploy, and feature zero-touch service provisioning eliminates truck rolls for service upgrades
- Large portfolio consisting of 10GbE and 2.5GbE LAN interfaces, integrated voice ports, outdoor ONT variants, SFP+ ONT
- Uniquely supports SFU, SBU, and MDU deployments streamlining installation
- Advanced Ethernet OAM provides insights and diagnostics via remote testing, end-to-end visibility, and fiber monitoring capabilities

Feature	SDX 630	SDX 631	SDX 631q NABANT000030	SDX 631qv NABANT000059	SDX 632v NABANT000135	SDX 632vh
Image						
Access Tech	XGS-PON					
Application	MDU/Small bus.	Residential				
Housing	C-temp SFP+	Indoor				Outdoor
FXS Interface	-	-	-	1	1	1
2.5GbE Interface	-	-	1	1	1	1
10GbE Interface	SFP+ pluggable	1	-	-	1	1
Add'l Features	SFP+ ONT	UPS/BBU capable				
Mounting	SFP+ cage	Fiber tray / Wall mount				NID outdoor housing

Residential Gateways



Ethernet Interfaces:

- WAN side: 1 x 10/100/1000 Base-T interface with RJ-45 connector
- LAN side: 2 x 10/100/1000 Base-T interfaces with RJ-45 connector

Wireless LAN Interfaces:

- 2x2 MIMO on 2.4 GHz
- 2x2 MIMO on 5 GHz
- PHY rate of AX3000
- Supports 160 MHz channel width
- Supports 4K video streaming and gaming

Nokia - Beacon 3.1 - WiFi 6 Premium Gateway

Enhanced WiFi coverage, dual-band support, and simplified setup. The 3.1 offers improved signal strength, better performance in dense environments, and advanced security features, making it ideal for modern, high-demand home networks and smart devices integration.

Key Features:

- Coverage up to 1,500 sq. ft.
- Nokia WiFi mesh creates a seamless WiFi network throughout the home
- Fast and reliable WiFi with a capacity of AX3000 for typical WiFi usage
- Simple, app-based setup and management
- Use it to extend coverage of an initial Beacon 3.1 or compatible Nokia ONTs



Ethernet Interfaces:

- WAN side: 1 x 10/100/1000 Base-T interface with RJ-45 connector
- LAN side: 2 x 10/100/1000 Base-T interfaces with RJ-45 connector

Wireless LAN Interfaces:

- 2x2 MIMO on 2.4 GHz
- 2x2 MIMO on 5.2 GHz
- 4x4 MIMO on 5.8 GHz
- PHY rate of AX4200
- Supports multiple 4K video streams, gaming, and VR

Nokia - Beacon 6 - Tri-band WiFi 6 Premium Gateway

WiFi 6 technology, offering faster speeds, lower latency, and greater capacity. The Beacon 6 supports more simultaneous devices, has enhanced security protocols, and delivers superior performance in high-traffic environments, making it perfect for smart homes and demanding network applications.

Key Features:

- Coverage up to 2,000 sq. ft.
- Nokia WiFi mesh creates a seamless WiFi network throughout the home
- Even faster and more reliable WiFi with a capacity of AX3000
- Simple, app-based setup and management
- Use it to extend coverage of an initial Beacon 6 or compatible Nokia ONTs



Ethernet Interfaces:

- WAN side: One 1G/2.5G/5G/10G Base-T interface with RJ-45 connector
- LAN side: One 10M/100M/1G/2.5Gb Base-T interface and two 10M/100M/1000M Base-T interfaces with RJ-45 connectors

Wireless LAN Interfaces:

- 2x2 MIMO on 2.4 GHz
- 4x4 MIMO on 5 GHz
- 4x4 MIMO on 6 GHz
- Supporting 160 MHz channels
- PHY rate of AXE10200

Nokia - Beacon 10 Gateway

Supporting WiFi 6E to provide seamless, high-capacity mesh networking. A true tri-band device which can provide WiFi throughput of 10Gb. The Beacon 10 also offers enhanced security, and greater capacity for more devices, making it ideal for ultra-connected homes and high-bandwidth applications.

Key Features:

- Coverage up to 3,000 sq. ft.
- True tri-band: leverage the 2.4, 5 and 6 GHz bands
- 10Gb High-speed connectivity to the Internet
- High-speed connectivity in the home with a WiFi capacity of AX10200
- Extend the coverage with up to five Beacon 10 units



Ethernet Interfaces:

- WAN side: One 1G/2.5G/5G/10G Base-T interface with RJ-45 connector
- LAN side: One 1G/2.5G/5G/10G Base-T interface with RJ-45 connector and two 10M/100M/1G/2.5Gb Base-T interfaces with RJ-45 connector

Wireless LAN Interfaces:

- 4x4 MIMO on 2.4 GHz
- 4x4 MIMO on 5 GHz low
- 4x4 MIMO on 5 GHz high
- 4x4 MIMO on 6 GHz
- PHY rate of AX3000
- Supports 320 MHz channel width on the 6 GHz band

Nokia - Beacon 24 - WiFi 7 Quad-band Gateway

Extends multi-Gb broadband service throughout the entire home via an innovative antenna design and orientation for omni-directional coverage, which provides the best overall horizontal coverage, as well as vertical coverage for WiFi devices on different floors. Uses WiFi EasyMesh™ to take the role of wireless router with access to the broadband network. The wireless mesh network can be extended further with additional Beacon 24 units.

Key Features:

- Coverage up to 3,500 sq. ft.
- Quad-band concurrent WiFi 7, compatible with all earlier generations of WiFi
- Full quad-band with 4x4 MIMO on each band
- Multi-link operation (MLO) support for higher throughput and lower latency
- Extend coverage with additional Beacon 24 units



Ethernet Interfaces:

- 4 x 10/100/1000BASE-T LAN Ports with RJ-45 Connectors
- 1 x 10/100/1000BASE-T WAN Port
- RJ-45 Ports with integrated link and activity LEDs

Wireless LAN Interfaces:

- 2x2 on 2.4 GHz
- 2x2 on 5 GHz
- 4x4 MIMO on 5 GHz high
- 4x4 MIMO on 6 GHz
- Dual Band Radios
- Supports 160 MHz channel
- WPA3 & Bluetooth 5.0

Adtran - 834-v6 - WiFi 6 Service Delivery Gateway

A carrier-class, dual-band 2x2 11ax Ethernet residential gateway with voice ports and OpenSync support. With a powerful dual-core ARM Cortex-A53 processor, and built-in MU-MIMO and OFDMA, and high-performance H-polarization omni-directional antennas, the 834-v6 delivers multi-Gb wireless and wired throughput to all connected devices across the home.

Key Features:

- Extends Multi-Gb broadband over WiFi 6
- Dual-band 2+2 11ax
- 2 x SIP-enabled Phone Ports
- Zero-Touch Installation, Remote Troubleshooting and management via TR-069
- Adaptive mesh technology



Adtran - 841-t6 - WiFi 6 Service Delivery Gateway - NABAGY000008

A carrier-class, 802.11ax Ethernet residential gateway with tri-band mesh, and 2.5Gb Ethernet WAN/LAN port.

Key Features:

- Extend multi-Gb connectivity via WiFi 6 technology
- High-performance tri-band mesh for coverage across the home and property

Residential Gateways

Adtran - SDG 8600 Series - WiFi 6 and 6E Residential Gateways and Mesh Satellites

Combine power and energy efficiency in a compact footprint 60% smaller than other carrier-grade residential gateways. Supporting 2.5GbE on both the LAN and WAN interfaces, these high-performance gateways are ideal for premium multi-Gb service delivery. What's more, the SDG 8600 Series supports both Intellifi and Plume managed WiFi platforms, as well as standard TR-369.





Key Features:

- Engineered to be fast, small, and efficient, with up to 10Gb across WiFi and wired interfaces
- Available in WiFi 6, 6E, and 7
- 8600/8700 Series include processors that are 2x more powerful and with 3x more bandwidth over greater distances than previous models
- Can serve over 250 connected devices, with 4x4 streams on all bands



The Adtran Intellifi® Mobile App

Enables self-installs and offers enhanced controls for a personalized in-home WiFi experience. The Intellifi app offers extensive network stats, speed test results, device identification, parental controls, network security, and guest access features.

Feature	SDG 8612	SDG 8614	SDG 8622	SDG 8632
Image				
Wireless standard	WiFi 6 (802.11ax)			WiFi 6E (802.11ax)
Mesh	Dual-band		Tri-Band	
WiFi Configuration	4x4 (2.4GHz), 4x4 (5GHz)		4x4 (2.4GHz), 4x4 (5GHz), 4x4 (5GHz, backhaul)	
Application	Gateway		Gateway, Mesh Satellite	
WAN Ports	2.5GbE	2.5G SFP+	2.5GbE	
LAN Ports	1x 2.5GbE, 3x 1GbE		1x 2.5GbE	
Managed WiFi Platforms	Intellifi, Plume, TR-369			



Adtran - SDG 8733/8734 - WiFi 7 10Gb Residential Gateways

With 6GHz and ultra-wide 320MHz channel support and featuring WiFi at speeds of 10Gb and beyond. The SDG 8700 Series also ensures 85% lower latency for lag-free AR/VR, cloud gaming, and provides more reliable coverage using all three bands. The SDGs support both Intellifi and Plume managed WiFi platforms, as well as TR-369.

Key Features:

- Carrier-class, 802.11be (WiFi 7) residential gateway with tri-band mesh
- 1 x 10GbE, 3 x 1GbE LAN ports
- 4x4 radios on 2.4GHz and 5GHz, 4x5 radios on the 6GHz, and wider 320MHz channels support
- With five streams on the 6GHz channel, the SDG 8733/4 delivers up to 20% greater rate-reach for enhanced coverage

What's the difference:

- **8733:** 10GbE WAN port
- **8734:** 10Gb SFP+ WAN (XGS-PON or 10GbE uplinks)



What is TR-369? Upgraded TR-069, TR-369 or User Services Platform (USP), was developed and is maintained by The Broadband Forum. TR-369 is a standardized protocol for managing, monitoring, upgrading, and controlling connected devices. All residential gateways listed in this document are TR-069 or TR-369 compliant.

What are the major features of TR-369? The User Services Protocol is designed with 4 major features in mind:

- **Flexibility** – USP is applicable to many different use cases or deployment scenarios, and able to be implemented by new and varied kinds of devices.
- **Scaling** – USP is able to scale to a very large number of managed devices and connections.
- **Standardization and ease of migration** – USP meets the challenges of connected device management with an interoperable, non-proprietary standard, that easily evolves from existing TR-069 deployments.
- **Security** – USP is designed with application-layer security, authentication, integrity, and privacy from the ground up.



What is Plume? Plume is a Software-as-a-Service (SaaS) company that provides self-optimizing WiFi systems for homes and small businesses. Plume's technology uses AI and cloud-based systems to analyze network usage and adapt to changing demands, providing fast, reliable WiFi throughout a space. Plume's systems also offer other features. Including:

- **HomePass:** Allows users to control who has access to the Internet, including guests and family members
- **AI security:** Monitors devices for suspicious activity and provides protection
- **Parental controls:** Allows users to set controls for their children
- **Network monitoring:** Allows users to monitor their network remotely using the Plume app

PON / GPON / XG / XGS / 10GEPON Live Signal Testing

Terminology:

- **PON** - Passive Optical Network
- **GPON** - Gigabit PON
- **BPON** - Broadband PON
- **XG-PON** - 10 Gigabit PON
- **EPON** - Ethernet PON
- **XGS-PON** - 10 Gigabit Symmetrical PON



Netceed – MUL-OPM-XGPON-VFL-400 – XGS-PON Power Meter & End-face Fiber Inspector

Designed for XGS-PON network construction and maintenance. The voice, data, and video wavelengths (1270, 1310, 1490, 1550, 1577nm), can be measured synchronously and the corresponding optical power level can be displayed with this meter.

Key Features:

- Supports co-existence of G/E-PON and XGS-PON/XG-EPON services on the same PON
- Simultaneous realtime power level measurements of voice, data, and RF video signals on fiber at 1490, 1550, 1577nm downstream, and 1270, 1310nm upstream
- Separate Optical Power Meter port calibrated to test single and multi-mode fiber at 850, 1300, 1310, 1490, 1550, and 1625nm



The Netceed XGS-PON Power Meter includes an embedded Fiber Inspection Module that provides a critical view of the fiber endface. (Netceed Fiber Microscope MUL-OPM-XGPON-FVSCOPE sold separately).



VIAVI - OLP-87 - SmartClass Fiber PON Power Meter - NMWLFO000509

FTTH/PON Power Meter for use in activating and troubleshooting BPON, EPON, GPON, and high speed 10GPON/XG-PON and 10G-EPON networks - and higher capacity NG-PON2 networks. Combines a high-performance wavelength-selective Power Meter with pass/fail fiber inspection analysis capability into one portable solution.

Key Features:

- Through-mode capability for simultaneous measurement and display of downstream and upstream wavelengths
- Automated pass/fail fiber inspection analysis with optional P5000i microscope
- Easily measures PON power and automatically certifies fiber-end face condition



VIAVI - OLP-88 - SmartClass Fiber TruePON Tester - NOCYWD000020

Capable of testing and identifying OLT and ONTs, ONT activation process verification, automatic PON power levels certification, in-service insertion loss test, and Alien/Rogue ONTs detection - together with accurate downstream and upstream power level measurements. The built-in GPON data analysis simplifies and speeds up installation workflows by automatically providing all necessary information about the system to the service technician.

Key Features:

- Ensures first-time-right GPON network acceptance
- Reduces workflow complexity during service activation
- Speeds-up on-site troubleshooting and facilitates service recovery



VeEX - FX120 - PON Analyzer and Multi-Gb Service Test Set

All-in-one advanced PON analyzer with a native RJ45 port and an SFP+ cage to support Layer 4+ testing. The FX120 monitors activation process by displaying downstream/upstream power levels as well as OLT/ONT IDs and status, and TC-Sync. Optional speed test, Internet connectivity test up to 10Gb, and end of fiber detection feature to check drop cables length before testing.

Key Features:

- Compatible with GPON, XG(S)-PON, EPON, 10G EPON networks
- Pass-through selective wavelength PON meter for ONT/ONU service verification



AFL - TS100 - FlexScan FTTH PON Troubleshooter - NMWLFO000229

Used for testing to splitter - to automatically detect, identify, and locate single-mode optical network issues, plus recommended corrective actions. It has an integrated VFL, power meter, light source and Bluetooth/WiFi. With a dual-wavelength power meter, the optical troubleshooter will verify GPON, video and XG/XGS-PON or 10Gb Ethernet PON power levels.

Key Features:

- Locate faults in <3 seconds with the press of a button
- Displays link length, loss, ORL, and pass/fail results
- Verify loss of PON splitters up to 1:64 split ratio
- Rugged, lightweight, hand-held for field use



FlexScan TS100 pairs easily with AFL's award-winning FOCIS® family of connector inspection probes

PON / GPON / XG / XGS / 10GEPON Live Signal Testing



VIAVI - FOPT-165FAPM-APC - Optimeter G-PON / XG(S)-PON Fiber Tester - NMWLFO000571

Troubleshoot fiber links utilizing the intelligent optical fiber meter, and conduct testing and analysis in less than one minute.

Key Features:

- Simple user interface requires no settings and no training
- Combines all the key features and capabilities to enable installers to certify the last mile drop performance is in line with expectations
- Identify and locate any issues and determine responsibility to fix while still on site or hand off
- Built-in selective PON power meter



EXFO - PPM-350D - PON Power Meter - NMWLFO000333

Supports legacy & next-gen PON technologies including XGS-PON and NG-PON2. Automatically detects and adapts test parameters for the PON technology in use at the customer premises.

Key Features:

- Supports 10Gb-capable PON networks
- Pass-through mode for ONT/ONU verification
- Bluetooth and USB connectivity
- Smart app to configure, execute and report jobs
- The first PON-aware™ power meter to automatically detect and test next-gen and legacy PON technologies

Field Test Instruments



Netceed - MU1312-YY - Mini Optical Power Meter with VFL - NMWLFO000447

Designed for use with an optical light source for performing optical loss measurements on fiber optic cables. Used for optical signal power measurement at a variety of wavelengths from 850 - 1625nm.

Key Features:

- Optional 10, 20, or 30mW VFL
- Choice of Standard and High Power version (-50dBm ~ +30dBm)
- Integrated with high-performance optical detector - Mini size, lightweight



VIAVI - NSC-200 - Network & Service Companion - NMWLFO000559

Allows techs and contractors to validate both network and service layers up to 10Gb before sharing their test results with customers and providers.

Key Features:

- GPON, XGS-PON, Ethernet, and WiFi tests, including through-put tests up to 10Gb
- Ethernet 1Gb, 2.5Gb, 5Gb, and 10Gb interfaces
- WiFi 3x3 tests and WiFi Expert up to WiFi 6 (802.11 a/b/g/n/ac/ax)
- PON data analysis (PON-ID) and power levels
- Access networks:
 - PON for FTTH & 5G x-haul
 - CATV for DOCSIS 3.1
 - Telco for xDSL & Gfast



EXFO - OX-1 - Optical Fiber Multimeter - NMWLFO000539

Verifies optical links in seconds and automatically explores further when potential issues are suspected. Multimeter quickly measures multiple key optical parameters such as loss (dB), optical return loss (ORL) (dB), length, and power (dBm). Assists technicians in verifying fiber optic link health and troubleshoot potential issues.

Key Features:

- Industry's first OFM
- FTTH service activation and repair, including all in-service testing benchmarks
- Displays fiber length and ORL in under 3 seconds
- On-the-spot detection and location of common causes of failures
- Built-in power checker and light source



VeEX - NET-BOX

Optimized Quality of Experience (QoE) testing platform for Gb services. NET-BOX offers a low-cost high-performance alternative to expensive laptops for multi-Gb business and residential speed tests.

Key Features:

- Truly scalable with a multi-test port architecture, with four 1000BASE-T ports for up to 4Gb full line rate capability and one SFP cage for 1000BASE-X and 2500BASE-X
- Can test the limits of verifying QoS and assure QoE at and beyond 1 Gb

Field Test Instruments



VIAVI - OMK-35V2 Kit - Optical Test Kits - NMWLFO000481

A range of pocket-sized and rugged instruments for installing and maintaining singlemode and multimode fiber optic networks. All test kits are equipped with an optical power meter and a dual or quad-wavelength optical light source for power level, insertion loss measurements, and continuity checks.

Key Features:

- Broadband power meter with dual SM or Quad SM/MM sources
- Fiber Tracing detects optical light source tone(s)
- 'OptiChek' measurement mode
- Bluetooth low energy connectivity to the VIAVI Mobile Tech App



EXFO - EX1 - FTTH and Business Services Tester - NMWLFO000559

Pocket-sized test solution that evolves with your network, from validating bandwidth speed to monitoring residential and business customer's quality of experience (QoE).

Key Features:

- Gigabit, GPON, and WiFi tester:
 - Wireless interface (WiFi) for both Speedtest® by Ookla® and WiFi channel map capabilities. Support of 2.4 GHz and 5.0 GHz WiFi frequency bands
 - GPON ONT emulation allows the ability to detect PON ID, ONU ID, optical RX power, OLT optical TX power, ODN loss, and ONT operational status
 - Full line rate capable gigabit tester powered by the industry-leading Speedtest® by Ookla® algorithm.
 - Supports VLAN and PPPoE

Visual Fault Locators - VFL



Netceed offers a wide selection of Visual Fault Locators (VFLs) from premier manufacturers. These devices are designed to detect sharp curves, breaks, or damage in fibers, perform end-to-end continuity tests, trace and identify fibers in optical networks, and identify defects in OTDR dead zones.

Key Features:

- High powered laser (models from 1 to 50mW) for singlemode and multimode connectors
- Continuous or flash illumination
- 1.25 and 2.5mm connector input

OTDRs



Netceed - MU1299E - Mini OTDR - NMWLFO000302

Integrates 12 functions including auto and expert OTDR, event map, OPM, RJ45 cable tracker, and 'computer level' file management. Used to measure the length, loss, connection quality, and other parameters of optical fiber. Widely used in FTTH, secondary backbone network engineering construction, maintenance, and emergency repair.

Key Features:

- Expert OTDR: Professional measurement, curve/list/map are displayed simultaneously
- Auto OTDR: No complex settings, one key test
- OPM supports CW/270/330/1k/2kHz frequency identification
- VFL and light source can run in the background for multi-tasking



VIAVI - IM2-APC - STOTDR-PREMIUM SmartOTDR™ Test Kits - NMWLFO000395

This essential handheld fiber tester is an easy-to-use device with robust wireless connectivity options. It integrates all the essential fiber test requirements into a single device with OTDR measurement, fiber end face analysis, optical loss testing, and visual fault locator.

Key Features:

- Single-/dual-/tri-wavelength versions with 1310, 1550, and in-service 1625nm wavelengths
- Built-in broadband and dual-band selective power meter (1490/1550/1577 nm)
- PON optimized to test through a 1x128 splitter with FTTH-SLM



EXFO - 730D - MaxTester PON/Metro OTDR - NMWLFO000410

Optimized for FTTH/MDU fiber deployments. Fully featured, entry-level, dedicated OTDR with tablet-inspired design. Suitable for metro and optimized to test through optical splitters, for seamless end-to-end FTTH characterization and troubleshooting.

Key Features:

- FTTH in-service testing at 1650nm with optional in-line
- Dynamic range up to 39dB for up to 82 mi (132km) point-to-point
- Swap-out connector, replaceable whenever necessary for optimal performance over time without undue service cost and downtime

Fiber Monitoring

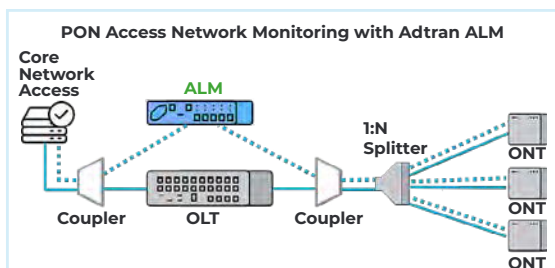


Adtran - ALM Series - 24x7 Proactive Fiber Monitoring

Provides fiber health information in a matter of seconds: An in-service fiber monitoring solution that allows operators to get real-time insight into the quality of their fiber infrastructure.

Key Features:

- Two ALM variants for supervision of 16 or 64 fibers per ALM device
- **PON Network Monitoring:** Detailed access network fiber information from the OLT, to the splitter, and individual ONTs supporting all PON generations (GPON, XG-PON, XGS-PON)
- **Universal Solution:** Monitoring of point-to-point and point-to-multipoint PON networks for active and dark fiber applications
- **High Port Density Monitoring:** For highly dense installations - Up to 800 ports can be monitored in a single location
- **Improved Service Quality:** Real-time information on fiber integrity for fast failure detection and short repair cycles
- **Streamlined Operations:** In-service fiber monitoring for immediate separation between failures of active devices and problems with the fiber plant



Inspection Microscope / Probes



VIAVI - INX 760 - Automated Probe Microscope - NMWLF0000481

Automates every step of the inspection process, delivering fast, reliable, and repeatable results without any hassles. Supports simplex, duplex, and multi-fiber connector types.

Key Features:

- True automated operation in 5 seconds for simplex, 6 seconds for duplex connectors
- AutoID inspection microscope tips eliminate mistakes of error-prone manual or RFID configuration when changing tips



VIAVI - FiberChek™ - FITFCKIT3 - Wireless Inspection Probe - NMWLF0000586

Built-in image viewing, auto-focus, pass/fail analysis, and result storage and recall. This probe completely automates inspection workflows to ensure fast and accurate performance.

Key Features:

- Connector inspection probe with integrated touchscreen display - works autonomously
- Fully automated operation: Auto focus, auto image centering, and auto pass/fail analysis
- WiFi/Bluetooth connectivity
- Dual magnification with toggle button allows easy switching in both live and analysis views
- Comes with soft case and inspection tips for SC/UPC, SC/APC, LC/UPC, and LC/APC

Live Fiber Identifiers



Netceed - MTEU10241 - Live Fiber Identifier - NMWLF0000394

Ideal for online testing and used for live, nondestructive fiber identification. The MTEU10241 is capable of detecting the signal presence and direction at any location of singlemode fiber. This LFI incorporates an optional 10mW Visual Fault Locator module with fault location function.

Key Features:

- Compatible with 0.25 / 0.9 / 2.0 / 3.0mm fiber, no need to change clamping mechanism
- Compact design with self-lock trigger
- Detect frequency: CW, 270Hz, 1 & 2kHz
- 700-1700nm wavelength range
- Built-in lithium battery, type-C port
- LED light and 10mW VFL
- Non-destructive macro-bending technology



EXFO - LFD-300B/TG-300B - Live Fiber Identifier/Tone Generator - NMWLF0000406

Enables technicians to identify a specific live fiber without having to disconnect it and, above all, without having to guess. The end result: no more network outages caused by inadequate fiber detection or identification, and a minimized need to access the network, helping to prevent errors.

Key Features:

- Pinpoints a specific live fiber using EXFO's FiberFinder™ functionality
- Induces minimal loss: ≤ 1dB
- Locates a particular dark fiber using tone recognition (270Hz, 1 and 2 kHz)

Netceed Fusion Splicer



Netceed - FSPLICE-300 - Core Alignment Fusion Splicer Kit - NOSPMC000140

The tough and rugged Netceed FSPLICE-300 core alignment fusion splicer is drop/impact, dirt/dust, and water resistant. Netceed is proud to provide a 3 Year USA Warranty, and all USA Service and Support.

The fusion splicer employs high-speed image processing and special positioning technology allowing the fusion splicing to be completed in as little as a fast 7 seconds and can heat shrink in as little as an ultra-fast 9 seconds. The splicer is compact in size, lightweight, and is ideal to work just about anywhere including harsh outdoor environments, dark and remote worksites.

Key Features:

- A fraction of the cost of comparable splicers
- Fast 7 second splicing
- Ultra-fast 9 second heat shrinking
- Drop/impact, dirt/dust, and water resistant
- 6-motor precision mechanism
- 5-direction anti-shock
- State-of-the-art fiber Profile Alignment System (PAS)
- 3-year domestic, 1-year international warranty - USA service and support
- Quick-change rechargeable lithium battery
- German design, USA, and Japanese technology
- Titanium alloy frame
- High-performance processor board

AFL Fujikura Fusion Splicers, Cleavers, and Accessories



90S+ - Core Alignment - NOSPMC000069

Solves common problems seen in the field - from splicing poor quality legacy fiber to automated equipment maintenance and upkeep. Can be used in multiple field splicing applications including bend-insensitive fibers in drop cables, loose buffer fiber, and splice-on connectors. Bluetooth enabled.

Key Features:

- Cleaver tracking and upkeep with wireless communication with CT50 Cleaver
- Improved real-time arc control for fibers with poor cleave angles
- Loose and tight buffer with same sheath clamp
- Automated wind protector, sheath clamps, and splice operation
- Intuitive GUI with 5.0" touchscreen



This new technology improves splice loss significantly and reduces the risk of re-installation by analyzing the condition of both L & R cleave end faces and performs optimal fusion control.



CT50 Single and up to 12 Fiber Ribbon Cleaver

Features automated blade rotation, unprecedented durability, and simplistic maintenance. Paired with a Bluetooth enabled 90S+ and 90R fusion splicer, cleaver blade positions can be automatically advanced when needed based on cleave count or cleave quality. If automated rotation is not desired, the blade position can be advanced at the touch of a button, no tools required.

Key Features:

- Industry first cleaver ruggedized to withstand severe shock, including drops up to 30"
- Single or up to 12 ribbon fiber
- 60,000 cleave blade life



The CT50 fiber cleaver is enabled with wireless data connectivity. This capability allows automatic cleaver blade rotation when the 90S+ and 90R splicers judge the blade is worn. The 90S+ can connect to two CT50s simultaneously.



90R - Mass Fusion Splicer Ribbon Splicer - NOSPMC000149

Capable of splicing up to 16 fiber ribbons, the 90R features an easily replaceable V-groove system (and a spare set), which allows customers to install and remove the V-groove very quickly to accommodate for unique fiber spacing and coating. With automated splice start, tube heater, wind protector, cleave tracking, and blade rotations for up to 2 cleavers at a time, this splicer frees up operator time for other fiber preparation steps.

Key Features:

- Cleaver tracking and upkeep with wireless communication with CT50 Fiber Cleaver
- Automated wind protector, tube heater and splice operation
- User replaceable v-grooves
- Active Blade Management for cleave quality monitoring and correction
- 200µm and 250µm SWR universal ribbon prep accessories



RT-02 Ribbonizing Tool - NTFTFO000158

Enables quick and easy ribbonization of 12 individual fibers into a temporary ribbon which can be spliced using a 90R. The first universal ribbonizing tool on the market, suitable for forming a temporary tape from 200µm or 250µm loose fibers. It is also the first tool with a glue-free process for taping and splicing 12 fiber tapes. With this tool, you can now enjoy the benefits of bulk fusion splicing when installing the latest generation of loose fiber micro-cables.

Key Features:

- No glue needed
- Left and right fiber holder color codes printed on tool
- Color-coded loading not required
- Fibers loaded directly into the fiber holder

Sumitomo Series of Fusion Splicers



Q102-CA+ - Core Alignment - NOSPMC000130

NanoTune™ With NanoTune, the world's first AI programmed high-definition core aligning fusion splicer. NanoTune reduces the need to recut defective fiber cleaving edges - the primary source of frustration for operators.

Key Features:

- NanoTune & SumiCloud technology
- Splicing success rate of >90%
- Tough - survives 2.5' drop on 5 faces
- IP52, water & dust resistance
- Fast dual ovens - 8 sec heating
- 5" LCD intuitive touchscreen
- 300 splice cycles



What is NanoTune Technology?
NanoTune is able to splice fibers that would have previously required rework. This is accomplished by using state-of-the-art AI technology to accurately adjust parameters when splicing. NanoTune improves field splicing success rate to >90%.



Q102-M12+ - Ribbon Splicing - NOSPMC000143

NanoTune™ Designed to maximize work efficiency. Includes NanoTune, dual independent ovens, tool-free replaceable V-grooves, and special coatings. Easily adapts to 250µm and 200µm ecosystems.

Key Features:

- NanoTune & SumiCloud technology
- Versatile - Works well with all kinds of ribbon fibers from multiple brands
- Enhanced auto-clamping for better alignment



SumiCloud



Q502S - Clad Alignment - NOSPMC000154

NanoTune™ Features a lightweight work tray that is ready for use immediately out of the carrying case. Includes a built-in cooling tray and removable waste bin. Built to splice on the move - great for aerial splicing.

Key Features:

- NanoTune & SumiCloud technology
- Open and splice ergonomic design
- Tough - Survives 2.5' drop on 5 faces
- IP52, water & dust resistance
- 4.3" LCD intuitive touchscreen
- 250 splice cycles



Stand & Splice



FC-8R - Precision Fiber Cleaver - NOSPMC000072

Hand-held 1-step fiber cleaver with auto-rotating blade, smart cleave counter, and offcut collector, for up to a 12-fiber ribbon. Use in fusion splicing, field termination, or any application that requires precision in a confined space.

Key Features:

- Ideal for mechanical connectors and high-volume precision cleaving in any environment
- Precision blade performs 60,000 cleaves
- Cleaves can be performed in the palm of your hand

INNO Series of Fusion Splicers & Cleaver



VIEW 8X - Premium Core Alignment - NOSPMC000117

View Pro (manager) Equipped with IoT and GPS modules, ensuring state-of-the-art connectivity and enhanced security. Tailored for both large-scale operations and nuanced, detailed work. The View 8X has an extra large battery capacity allowing for extended operations.

Key Features:

- Ultra-large battery & pressure heater

Splice time: 4/5 secs
Heat time: 9 secs
Bat capacity: 9000 mAh
Cycles/charge
Splice & heat: 500



What is View Pro Manager?

The integrated web-based View Pro Manager is an IoT cloud-based management system integrated into all VIEW series of splicers. View Pro Manager improves communication and efficiency through centralized management.



VIEW 3X - Active V-Groove Clad Alignment - NOSPMC000114

View Pro (manager) Designed for reliability and consistency, delivering dependable splices with each use. Along with all of the VIEW X Splicers - the world's fastest splicing time.

Key Features:

- 5" high-resolution color LCD touch screen with user-friendly intuitive GUI
- Pressure heater technology

Splice time: 4/5 secs
Heat time: 9 secs
Bat capacity: 7000 mAh
Cycles/charge
Splice & heat: 350



VIEW 5X - Core Alignment - NOSPMC000142

View Pro (manager) Its high-resolution touchscreen and compact design offer user-friendly portability. In addition to advanced IoT and GPS capabilities, the View 5X illuminates dark environments with an enhanced 3xLED lighting system.

Key Features:

- Best for working in low-light environments

Splice time: 4/5 secs
Heat time: 9 secs
Bat capacity: 7000 mAh
Cycles/charge
Splice & heat: 350



V12 - Precision Fiber Cleaver - NOSPPC000040

Features a built-in automatic fiber shard collector and a magnetic universal holder (clamp). It has been designed to cover a wide range of different cables, including 250µm & 900µm fiber cable, flat cable, ribbon fiber, and jumper cable.

Key Features:

- Digital counter
- Single-action operation
- Excellent visibility (90°)
- Magnetic clamp

Netceed offers future-proof fiber optic cable engineered for today's super high-speed and high-performance networks

Easy Cable Entry & Preparation

- 12 fibers per tube construction up to 144 fiber designs allow easy termination and mid-span fiber access
- Flexible buffer tubes enhance mid-entry

Flexible Routing & Customization

- Flexible buffer tubes simplify routing, storage and prep
- Available in singlemode loose tube

Reliable Lifetime Performance

- Custom engineered for operation under full load
- Guaranteed standards-based performance
- Immune to electromagnetic fields

Versatile Installation & Use

- Various span distances
- Easy mid-entry is ideal for FTTH distribution applications

All-Dielectric Self-Supporting (ADSS)



AFL - ADSS Loose Tube Cable - NOCAA000041

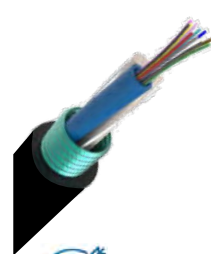
Designed for outside plant aerial transmission and distribution environments. There are no metallic components and the cable does not require a support or messenger wire. These attributes allow the cable to be installed in the power space of distribution lines. ADSS offers an alternative to typical strand and lash deployment when not available or preferred.

ADSS cable's low-cost installation, compact size, and specialized design make it the ideal, cost-effective cabling solution for FTTH and self-supporting aerial applications.

Key Features:

- Up to 432 fibers
- Gel-free buffer tube options available - up to 216 fibers
- Capable of span lengths up to 3,500'

Armored



CommScope - HeliARC™ Armored Cable - NOCAH000010

The helical fiber core represents a major innovation. Built specifically for low-density rural FTTH networks, it's unique design and easy handling reduce wasted material and time from deployments.



UNIQUE



OPTIMIZED



SLENDER

Unique stranding of the buffer tube and strength member eliminate filler tubes for a more robust design with increased strength for longer spans

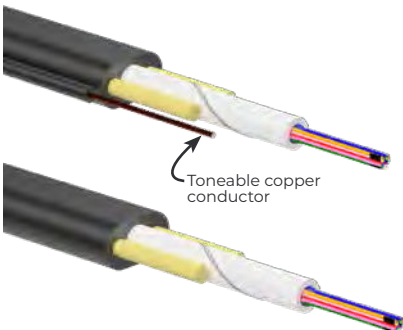
Optimized 12-fiber count delivers right-sized bandwidth for low-density areas

Slender form factor reduces weight, making HeliARC suitable for aerial deployment

Drop

Corning - SST-Drop™ - Single-Tube Dielectric/Toneable - Fiber Optic Drop Cable - NOCAD000146

The long-length ADSS version allows pole-to-pole span lengths ranging from 400' (122m) under NESC heavy ice and wind loading conditions to 500' (152m) under NESC medium loading. There is no support or messenger wire required, allowing installation to be achieved in a single pass, dramatically reducing installation time and cost while delivering high-speed internet. The SST-Drop is the perfect cable to run to rural FTTH deployments.



Corning SST-Drop™ **toneable** cables offer the ease of installation in an easy-access, single-tube design. The toneable version allows for effortless detection of buried cable with a toning conductor that can be separated. The cables are RDUP (RUS) listed and offer exceptional crush resistance, while the copper portion allows for clear detection in underground installation.

The **dielectric** version eliminates any bonding and grounding requirements. The cables are RDUP (RUS) listed and have exceptional crush resistance. Available in preconnectorized assemblies, the SST-Drop dielectric cable offers the perfect solution for drop applications.

Key Features:

- Up to 432 fibers
- Gel-free buffer tube options available - up to 216 fibers
- Strength element easily removed for field terminations
- No support or messenger wire required

NETCEED IS PROUD TO STOCK FIBER OPTIC CABLE FROM PREMIUM MANUFACTURERS



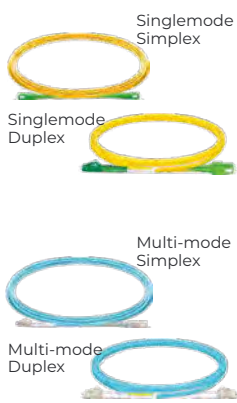
Fiber Optic Patch Cords & Pigtails

Singlemode fiber optic jumpers, or patch cables, come with a 9 micron diameter glass core. With the cladding layer, they are 125 micron, and with the buffer layer they are 250 micron.

Singlemode cables have a smaller glass core than multi-mode cables and because there is less dispersion of the light signal in the fiber, they can transmit the signal a greater distance.

Low Smoke Zero Halogen (LSZH) jacket, and are manufactured using either singlemode or multi-mode fiber and terminated with a range of connectors including SC/UPC, SC/APC, LC/UPC, LC/APC, FC/UPC, FC/APC, and ST/UPC. Other connector types are also available upon request.

Patch Cords




Netceed offers both singlemode and multi-mode fiber optic jumpers or patch cords including 9/125, 50/125, 62.5/125, 10Gb OM3, OM4, OM5, and OM2 cables.

Key Features:

- LSZH Jacket on all fiber varieties
- G.657.A2 Certified
- 2mm jacket for more flexibility and capacity in tight spaces
- Custom lengths and colors
- Meets all standard panel interfaces
- All cables serialized and test results are recorded
- High bandwidth, high tensile strength, small bend radius

Pigtails




Ideal for fusion splicing, pigtailed provide the optical performance required by modern network applications.

Key Features:

- Machine polishing ensures highest quality connector terminations and performance
- LSZH jacket on all fiber varieties
- Bundled with jacketed connector ends as required
- Low insertion and return loss
- Traceable, standards-based testing procedures
- Geometry compliant connector endfaces that are defect and contamination free

Connectors & Adapters



Netceed offers a wide variety of Adapters including options for:

- Interfaces: SC, LC, FC, ST, MPO, hybrid simplex, duplex, and quad
- Flange or flangeless body

Key Features:

- Field Mountable Connector (FMC)
- Time-saving, cost-effective, and reliable solution in the field
- Compatible with 250µm, 900µm, 2 and 3mm fiber

Splitters & WDM



Netceed offers splitters and WDM units in a variety of packaging options, with or without connectors.


Options include:

- Splitters: PLC or FBT, 1vN and 2vN
- WDM: Mux/Demux (CWDM, DWDM)
- Interfaces: LC and SC
- Package size: Discrete components, mini box, custom size that can be integrated into cassettes, LGX module

Key Features:

- Low insertion loss
- Even or various splitting ratios
- 1x2 through 1x64 configurations
- Bi-directional, compact
- Environmentally stable
- Telcordia GR-1221-CORE compliant

Attenuators



Optical attenuators in standard interfaces and attenuation values.

Options include:

- Interfaces: SC, LC, FC, ST, SC/APC, LC/APC, FC/APC
- 1 to 20dB
- Operating bandwidth: 1260 to 1650nm



LGX Cassette

Rack Mount

Demarcation Boxes / NIDs



Netceed - L70000526 - Outdoor ONT Enclosure - NOISWT000297



The Netceed Outdoor ONT Enclosure, Network Interface Device (NID) is a high-quality enclosure specifically designed to house electronic circuits for the growing FTTH and broadband access markets.

This NID is specifically designed to complement Adtran, Calix, and DZS ONT deployments.

Key Features:

- Flexible design accommodates many applications
- Compact, modular unit with a design that minimizes installation time and with ample room for future expansion
- Flame-retardant and impact-resistant
- Made with engineering-grade thermoplastic
- Hinged cover for screw and padlock



AFL - OptiNID® 300 Series - Optical Demarcation Slack Storage Closure - NOOSND000076

Designed smaller to suit FTTH demarcation applications, can for use in either indoor or outdoor environments. The closure is equipped to handle up to two adapters. Configured with routing rings positioned to accommodate safe slack storage, and can be either wall- or pole-mounted for ease of use and accessibility.

Key Features:

- Self-latching, hinged cover design allows easy access without loose parts
- Routing rings positioned for safe slack storage
- Capacity for up to two adapters
- Ground stud provided



Tii - 506F Series - Fiber Interface Device/Slack Storage Unit - NOOSND000068

Compact enclosures that provides a demarcation between the OSP fiber drop and customer fiber drop, as well as slack storage for up to 50' (15m) of customer drop fiber.

Key Features:

- Multiple slack storage and adapter plate configurations available:
 - 4 port patch with 2 fusion splice capacity
 - 6 port patch only
 - 12 port patch only
- 1/2" Grommet Kits compatible with RTK Series Riser Tube Kit
- Optional cable entry clamp and internal/external ground stud



Grommet Kits



Corning - FTH-602 - Fiber Transition Housing - NOOSPW000047

Provides an optical demarcation and interconnection point for FTTH applications. Mounted on the inside or outside of the structure, the housing provides physical protection for the transition between provider and customer and facilitates system testing.

Key Features:

- Supports 1 to 6 SC/APC adapters
- Accommodates up to 6 drop connections
- Equipped with a ground post
- Allows connection for tracer wire
- Holds 3 meters of Clearcurve® fiber
- Provides slack storage for minor repairs and testing
- Small footprint
- Can be mounted indoors or outdoors where space is limited
- Secure, weather-resistant housing
- Protects fiber and connections for long life



Fiber Optic Splice Closure



Netceed - AFN72-IP68 - Dual Management Optical Closure - NOOSND000108

An internal and external fiber distribution enclosure that has been developed for installation within the last mile of the FTTH network. Segregated internal cabling sections allow for the separation of network build elements and customer drop points with 3 separated management areas for inbound cables, splice management area, and drop cable management areas.

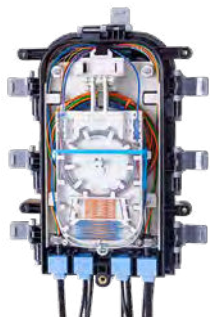
Key Features:

- Provides up to 24 subscriber drop ports
- Network security - Physical separation of incoming network fiber and connectorized drop cables
- Hinged adaptor tray for PLC splitter access
- Can be supplied with 4 mini splice trays for up to 96 fiber splice capacity using 45mm splice protectors
- G652D bend management compliant (R30mm radius)



Fiber Optic Splice Closure

Netceed offers a wide range of Splice Closures adapted to different types of applications including loose tube, ribbon, and micro-module in armored or dielectric configuration.



PLP - STP-XL - COYOTE Fiber Closure - NOOSAC000124

A flexible closure which provides fast customer connections. The cover latch system allows simple re-entry and keeps the closure watertight, even when permanently immersed in water (IP68). It can be used as an access closure or a distribution closure in FTTH networks.

Key Features:

- Capacity of up to 192 splices
- Capacity of up to 24xSC / 48xLC connectors
- Two-section design which provides separate access to the main cable splices and the customer cable splices
- Hinged splice trays for up to 24 splices (8 pcs max.), scalable through gradual adding of trays
- PLC splitter capability (small format)
- Support for ribbon fibers and midspan (loop-through) cable



Commscope - OFDC Series - NOOSTC000126

Including three different series, the OFDC family accepts a wide range of distribution and drop cables thus responding to virtually all application requirements. Each series has a common housing that can be configured to handle different connectivity solutions such as splice-only, pre-connectorized drop cables, and field-installable connectors. Modularly built, it allows easy integration of optical components, even at later deployment stages, and easy pass-through cabling. Advanced gel sealing technology ensures fast and easy field handling without the need for special tools. The field friendly design can be installed in pedestal, hand hole, pole, or strand mount applications for fast and easy integration into the FTTH network.

Key Features:

- Compact design
- Separate zones for looped cable storage, splicing, and patching to drop cables
- Hinged cover provides individual access to drop cable connection area
- Housing designed for wrap-around drop cable installation, enabling faster deployments

Hardened Terminals



Corning - Evolv® Terminals with Pushlok™ Technology - NOCYCD000236

Pushlok™ hardened connector technology is the key component enabling smaller terminals and drops for more FTTH networks than ever before. Designed for use in nearly every access network environment, the terminal is small enough to be placed in existing handholes or pedestals where space is paramount, on building facades, or in aerial networks (pole- or strand-mount). Improved aesthetics assist end-user adoption for facade applications.

Key Features:

- Due to its small size, the BPEO Size 0 is ideally suited for use within in all types and sizes of manholes
- Dimensions: 9.4" high x 8.8" wide x 3.1" deep
- Water & dust protection: IP68
- Up to 48 splices
- ECAM technology



CommScope - NOVUX Hardened Terminals with Prodigy - NOOSMT000929

Universal small-form hardened connector systems provide the ultimate flexibility and agility to fit in smaller spaces - up to 50% smaller compared to today's terminals and up to 37% smaller compared to NOVUX terminals with full-size connectors.

Key Features - All the advantages of NOVUX full-size hardened terminals plus:

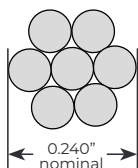
- Industry-leading footprint reduction
- Easy, safe, and error-proof connections
- Backwards compatibility
- Widest variety of technologies available from a single platform
- Application flexibility for new builds and upgrades
- Ready for the field workforce of the future
- Agile global supply chain backed by common platform design and processes



DROP & POLE LINE HARDWARE

The poles, walls, and other structures used for the roll-out of overhead tele/datacommunications networks are diverse. This diversification requires careful attention to the particularities of each type of support to ensure long-term network reliability as well as enhanced ease of installation. Netceed's high quality strand wire and wide range of FTTH pole line hardware products are the backbone and unsung heroes of any deployment.

Galvanized Steel Strand Wire



- 7 x Strand, left-hand lay
- Grade: EHS @ 210 KSI tensile minimum
- Coating Class A @ 0.6 oz/sq. ft. minimum
- CSA @ 0.035 sq. in. nominal
- 121 lb/1000' nominal weight
- 6,650 lb minimum break strength

Netceed - Galvanized Steel Strand Wire - NIHA000035

Netceed's galvanized strand boasts exceptional strength, serving as a crucial component in guying utility and communications towers and other essential support structures. As a messenger cable supporting communication cables and electrical conductors, our galvanized strand offers a secure platform for cable suspension and connection along utility poles or tower structures. When used as an overhead ground or static wire its galvanized coating provides a reliable path for lightning to dissipate safely into the ground.

Key Features:

- Uncompromising durability
- Versatility for an array of uses
- Excellent tensile strength
- Easy to work with
- High elastic limit
- Advanced corrosion resistance

Dead End for Strand Wire

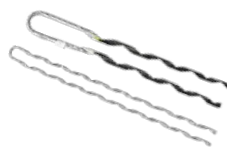


Also known as a Strandvise, they are designed to support both ends of self supporting multi-pair drop wire. Used as a deadend support for Figure 8 cable.

Key Features:

- Rated to hold a minimum of 90% of RBS of the strand used
- 'Universal Grade' are recommended for use with Alumoweld, Aluminized, EHS, and Galvanized Steel
- 'All Grades' are recommended for use on common grade, Siemens-Martin, high-strength utility grade, galvanized, and aluminized steel strand

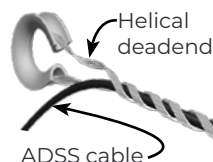
Helical Dead-End for ADSS & Strand Wire



Preformed dead-end cable grips designed for use on transmission, antenna, communications, and other types of guyed structures.

Key Features:

- Able to secure the soft pliable surface of a drop cable without causing attenuation
- Unlike wedge type dead-ends, the formed wire dead-end effectively transfers the axial load on the cable at the end of the dead-end legs to a low uniform radial compression near the dead-end loop.



Anchor Clamp for ADSS



Designed for dead-ending aerial ADSS cables on access networks when spans do not exceed 100M.

Key Features:

- Dead-ending of 6 to 20mm ADSS cables
- Minimum breaking load of 500/600 daN
- Installation on any pole hardware fitting: Brackets, cross-arms, or eye bolt with a min eye Ø of 15mm

ADSS Suspension Clamps

The high-quality aluminum suspension clamps are used to gently, but firmly support ADSS fiber securely onto the side of a pole or vertical surface with several mounting options to choose from.

Common Features:

- Galvanized steel clamp
- UV resistant neoprene
- Versatile with multiple installation options
- No special tool needed
- For suspension spans of various lengths



UV resistant high-strength plastic



Integrated bolt or band mount design



J Bracket



Mini - for short to medium span

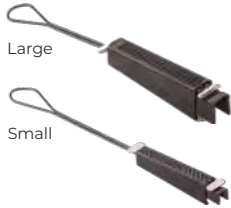


B Clamp

DROP & POLE LINE HARDWARE

Drop Clamps

Drop clamps are used to tension and secure the fiber optic drop cables to a pole or building in last mile FTTH network line deployment. They are compact size, simple structure, and user-friendly.



Key Features:

- Unique design constructed of premium corrosion resistant stainless steel provides secure attachment to hard jacketed fiber cables
- Black surface finish for ease of distinguishing fiber drop clamps from copper clamps
- Accommodates flat fiber drops with cross section measurements of 0.320" wide by 0.20" tall (small), and 0.600" wide by 0.30" tall (large)
- Corresponds to flat drop cables typically from 1 to 24 count
- Withstands up to 450 lbs (small), and 800 lbs (large) tensile force using Prysmian flat drop, Corning SST & ROC, and CommScope Arid-Core fiber optic cables

Pole Line Hardware

Netceed offers a full line of Pole Line Hardware that is designed to withstand the test of time. Our choice of material and finish combinations ensures maximum environmental protection regardless of location.



Wrenchable P House Hook - NIHAEA000366

Designed to secure drop wire or messenger cable to the side of a subscriber's house by either accepting the bail of drop wire clamps, or by wrapping the support wire of drop cable around the screw eye.



Q Span Clamp - NIHADH000230

Used in drop cable installations as an attachment to strand for either accepting the bail of drop wire clamps, or for wrapping the support wire of drop cable.



J Hook - NIHADH000242

J hooks are used for supporting bail-type drop wire and deadend clamps from poles and crossarms. The drive hooks have rolled fether drive threads and a pilot point for easy starting.

Bands & Buckles

Netceed's selection of banding tools, totes, buckles, and bands are made of the highest quality components and offer a wide selection for FTTH applications and deployments.



Adjustable Banding in Tote



Stainless Steel Buckle - NIHABD000074



Stainless Steel Band - 1/4" to 3/4" and in various lengths - NIHALW000043



Banding Tool - NIHALW0000361



Adjustable Universal Deadend Pole Band



Adjustable Pole Band

Cleaning Materials

Fiber hygiene is no less important as it becomes more widely deployed today. The proliferation of microduct cable, flat drop, and ADSS cable has reinforced the need for gel cleaners. Whether you are cleaning for splice preparation or cleaning a ferrule prior to making a critical connection in your network, Netceed has you covered with products that ensure the highest quality and lowest cost per clean.

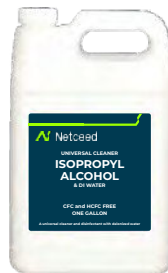


Netceed - Non-linting Wipes - NCCLNW000032

Single-ply, low-linting, very absorbent, soft, and will not scratch. They are excellent for light duty tasks and delicate surfaces. Because they are very low in lint and chemical extractables, they leave surfaces clean and pristine.

Key Features:

- Excellent at cleaning fiber optics and other sensitive surfaces
- Excel at removing dust and other particles that inhibit network traffic
- Solvent evaporates completely, leaving no residue
- Nonabrasive, safe on all fiber products



Netceed - Isopropyl Alcohol & DI Water - NCCLAL000035

A universal cleaner and disinfectant with deionized water. Removes most types of inks, pastes, light oils, and contaminants associated with soldering, fluxes, printing and most industrial cleaning applications.

Key Features:

- Regular cleaning strength
- Safe on plastics
- Flammable
- Mild odor
- Fast drying
- One gallon container



Netceed Hand Cleaning Towels

The Netceed towel is a unique waterless hand-cleaning system combining both a high quality liquid hand cleaner formula and a heavy-duty, non-scratching, abrasive hand-cleaning towel. Along with normal dirt and soils, the Netceed towel will remove heavy grease, lubricants, adhesives, oils, tar, asphalt, inks, wax, and many other difficult-to-remove soils, such as coal, dust, graphite, and grass stains.



Sticklers - High Volume Cleaning Kit - NCCLCK0000013

Contains all the equipment needed to clean thousands of SC, FC, ST, E2000, LC, and MU connectors - both unmated and in-bulkhead - all in a handy, rugged and easy-to-find woven bag.

Key Features:

- Everything you need for fast, reliable fiber optic cleaning - 2,300+ cleanings
- Unique Sticklers nonflammable cleaning fluid that replaces IPA alcohol for wet-dry cleaning
- 3 types of lint-free wipes
- 3 sizes of port-cleaning tools
- Optimized for the data center clients, telco central offices, and cable headends



Polywater - TC-1 - SqueakyKleen Wipes - NCCLGL000007

Fiber and copper gel-filled cable cleaner saturated lint-free wipes. Cleans and fans fiber in two wipes without alcohol. No follow-up with alcohol required to separated fibers when prepping for splicing.

Key Features:

- High-performance towelette removes pick from the entire surface of loose-tube or ribbon fibers
- Leaves no residue, less harsh on hands
- Reduces chemical odors and vapor concentrations in splice trailers and vaults



Sticklers - CleanClicker 750 Connector Cleaner NCFOFC000028 - 2.50mm NCFOFC000057 - 1.25mm

Rugged, precision cleaners use a smooth click-to-clean push-action with a light tip forces to reduce the risk of end-face damage. Available for 1.25 & 2.5mm connectors.

Key Features:

- 750+ cleans in each tool
- High purity cleaning strand removes dust, particulate, and oil contamination
- Pen-style tool cleans 90% of all connectors with just a single click
- Will not damage end-faces
- Long throw, so more cleaning ribbon is used on every activation

Fiber Optic

Almost nothing is worse for your network than a dirty connector. Proper cleaning practices help prevent downtime and reduce back reflections. Netceed provides many cleaning methods and even more cleaning options available today for technicians to keep the connections in your network pristine and error-free.

Netceed - Splice Sleeves - NCFOSS00004x

Translucent heat-shrinkable tube and stainless steel strength member are designed to prevent stress and protect fiber optic splices in both field and factory operations. Sleeves are made to heat shrink tightly and remove air, while holding the delicate splice and support rod firmly in place.



Key Features:

- Provide protection and increased stability to splices
- Heat Activated
- Clear / translucent

- **NCFOSS000048 - Single Fusion Slim - 60mm**
- **NCFOSS000045 - Single Fusion - 45mm**
- **NCFOSS000046 - Mass Fusion - 40mm**

Sticklers - CleanStixx Swabs - NCFOFC00005x

Designed to be used with the Sticklers Fiber Optic Splice and Connector Cleaner, each CleanStixx swab uses a unique, patented, high-purity fibrous tip to clean fiber optic end-faces. The tip is precision molded to be slightly narrower than the alignment sleeve. This enables the tip to spin off-center and greatly improves cleaning results - even on small form factor connectors.



Sticklers Fiber Optic Splice & Connector Cleaner

out-performs alcohol, and enhances the cleaning efficiency of any wipe, swab, or cleaning tool.

Each CleanStixx swab is color-coded for the type of connector it is designed to clean (see table, below). For example, the popular SC connectors are cleaned with the blue CleanStixx swab; LC connectors are cleaned with the green CleanStixx swab, and so on. This makes training easy, and with a quick glance you can confirm you have the right CleanStixx swab for the job at hand.



Description	Cleans
1.6mm CleanStixx - Red	MIL PRF 29504/5, MIL PRF 29504/15, MIL DTL 38999, MIL DTL 28876, SMPTE304 Jack
1.25mm CleanStixx - Green	LC, MU, SFP+, ODC, ARINC801, NECON, LUXCIS
2.5mm CleanStixx - Blue	SC, ST, FC, E2000, MIL DTL 83526, OptiTap
MT CleanStixx - Pink	MPO, OptiTip, HFMO, MT Ferrules
EB CleanStixx - Purple	1.2mm Lensed Termini for MIL 38999
CleanStixx Military Variety Pack	10 @ of S12, S16, S25, P25, XMT
CleanStixx Commercial Variety Pack	10 - S12 CLEANSTIXX, 20 - P25 CLEANSTIXX, and 20 - S25 CLEANSTIXX

Fixation

Now is the time to build your fiber network to last a generation. Netceed offers quality cable ties, vinyl tapes, and an abundance of fixation products to help identify, bundle, and protect your network at the best prices.



Netceed - PVC Electrical Tape - NCFXTA00005x

Soft backing with excellent adhesion and holding ability. Comes in standard 7mil and all-weather 8.5mil.

Key Features:

- Flame retardant plasticized polyvinyl chloride film
- Aggressive rubber-resin adhesive
- Unaffected by moisture and most chemicals

Part #	PVC Tape Dimensions
MCOU30000 NCFXTA000057	3/4" x 60' (19mm x 18.3M), 7.5 mil
MCOU30004 NCFXTA000056	3/4" x 60' (19mm x 18.3M), 8.5 mil
MCOU30005 NCFXTA000059	1" x 36' (25.4mm x 11M), 8.5 mil
MCOU30006 NCFXTA000058	1.5" x 44' (38.1mm x 13.4M), 8.5 mil



With color-coded cable ties, specific colors can be assigned to specific types of cable.

Netceed - Cable Ties - NCFXTW000183

Heavy-duty cable ties designed to withstand extra pressure and weight to provide a more secure bundling ability. For indoor or outdoor use.

Key Features:

- Available in various sizes, colors, and tensile strengths
- Constructed with nylon resins
- -40° to +185°F temperature range
- Extreme weather and UV resistant



Netceed - Fiber & Drop Dual Flex Cable Clips

Flexible cable clips are used to avoid cable strain and preserve signal integrity. Used to mount and manage cabling / wiring runs between components.

Key Features:

- Durable polyethylene construction with UV stabilized material, self-tapping screw - indoor and outdoor applications

Identification Labels & Markers

Whether you're the first into market with fiber, or you're overbuilding existing, marking your facilities properly should be a priority. Let Netceed customize your tags, marker posts, and labels to help you save on branded solutions.



TEMPO - OmniMarker II - EMS Marker - NSJPUL000029

EMS Markers provides an improved method for electronically marking and locating underground facilities. Contains a large gimballed coil that automatically orients itself horizontally when placed, ensuring that there is a location "sweet spot" directly above the point of interest.

Key Features:

- Enclosure HDPE fully sealed
- Can be buried 3' deep in typical soils when mounted vertically
- RoHS and REACH compliant
- Thermoplastic elastomer clamp tie suitable for ducts up to 2' in diameter

Fiber Optic Cable Marking Tie-on Warning Label

Tie-on warning labels are available from Netceed in a variety of sizes and colors with many standard logos. Selection includes Wrap Around, Tie-On, Sticky-Back, and Write-On.



Key Features:

- Self-laminating flap
- 3-7/8" x 1-3/4" tie-on label
- Variety of colors
- 20 labels per pack



Fiber Optic Cable Tag Wrap-around Warning Label

Critical warning and safety, overhead and above ground marking, outdoor use, utility labeling, asset marking and tracking.

Key Features:

- Custom printing and colors are available upon request
- Available in orange, red, yellow, black, green, blue, white
- Waterproof, permanently coiled
- Resistant to solvents, UV rays, and abrasions

Conduit & Civil Construction

Underground utility construction is a dirty job, and we know the products to help keep your network infrastructure readily accessible in the mud. From pull tape that will maintain its print line over time to plugs that secure conduit access points, count on Netceed to protect the infrastructure you depend on.



Netceed - Cable Pull Tape - NTCPPR000051

Premium, 100% woven polyester pull tapes for pulling wire and cable through conduits and ducts. Low stretch, high tensile-strength pulling lines have a very low coefficient of friction to minimize duct cutting. Clearly labeled with sequential markings every foot for easy calculation of progress. Lightweight and easy to blow through conduit.

Key Features:

- Optional detectable copper 22 AWG wire for signal locating
- Corrosion resistant fibers and conductor
- Accurate sequential footage markers, also available in metric
- Wire conductors can easily be spliced in the field
- Various reel lengths

Specifications:

- Tensile Strength 1,250/1,800/2,500 lb. (min)
- Various working loads from 1,250 - 6,000 lb.
- Color: White
- Print color: Black
- Pre-lubricated with silicone

CalMissile Line Carriers - NTFRPF000265

Constructed with heavy-duty stainless steel hardware and polyurethane blow cups, this ultra-tough projectile will perform flawlessly time and time again.

Key Features:

- Ultra-tough and re-usable
- Fast blowing, low friction
- For use with duct and innerduct
- Tear resistant
- Available in various sizes from 1" to 8"



Kwikie Blank Duct Plugs - NCCCDF000377

Essential to any datacenter, telecom, or underground electrical project. The proper sealing of conduits and innerduct is vital for protecting infrastructure investment and, in many cases, required by code.

Key Features:

- When the thermoplastic elastomer gasket is expanded, it creates a water, air, and rodent-resistant seal - protecting the conduit from damaging environmental conditions



FTTH Tools

Having the right tools is paramount for technicians working in on FTTH networks. These tools are not merely conveniences, they are essential components that directly impact efficiency, accuracy, and safety throughout the project. Tasks that would be time-consuming or impossible without specialized tools can be completed efficiently and with minimal disruption to operations.



Netceed - Multi-function Rolling Backpack

Carry all of your FTTH tools in this convenient rolling backpack. High durability, with ergonomic padded adjustable shoulder straps provides for backpack use, or use the push-button telescopic locking handle and in-line skate wheels for a smooth roll.

Key Features:

- Spacious front organizer pocket, safety reflective stripes
- 2 x side mesh pockets and many interior and exterior pockets

Netceed - 3-Hole Fiber Optic Cable Stripper - NTFTFO000169

Three-hole design efficiently removes 2 to 3mm fiber jackets and buffers down to the 125 micron bare fiber in one compact tool.

Key Features:

- All stripping notches are quality manufactured to precise tolerances to ensure clean, smooth strips with every use
- Factory-set blade notches require no adjustment and will not scratch or nick the fiber



Jonard - CST-1900 - Round Cable Strip & Ring Tool - NTFTFO000106

Designed for fast and precise removal of cable jackets from round cables that are 3/16" to 1 1/8" (4.5 - 29 mm) in diameter.

Key Features:

- Patented stripping mechanism provides a spiral stripping mode to strip and remove tough insulations
- Triple-action design makes longitudinal cuts for end stripping, spiral cuts for end and mid-span stripping, and circular cuts for jacket removal



Netceed - Fiber Optic Kevlar Scissors - NTFTHT000338

Perfect for cutting kevlar & aramid strength members. The sharp blades are made of high carbon molybdenum and vanadium steel to ensure maximum longevity

What is Kevlar?

Kevlar is a synthetic and lightweight fiber that is heat-resistant up to 800°F, has a tensile strength-to-weight ratio that is five times greater than steel, and resists corrosion, making it extremely strong, durable, and the perfect protection for fiber optic cable.

Key Features:

- One blade is micro-serrated to help prevent slippage while cutting
- Ergonomic non-slip handle made from nylon and synthetic rubber
- Powerful and precise cutting action
- Can be used by right- or left-handed technicians

Jonard - MS Series - Mid Span Slit & Ring Tool

Designed to provide easy access to optical fibers in outer jackets and buffer tubes and incorporating a ring feature in the tool to make it even more versatile.

Key Features:

- One side of the tool performs radial/ring cuts and the other side slits the cable (longitudinal cut)
- Compact design makes it perfect to use in tight spaces or on the go
- Indicator line on top of the unit indicates the position of the blade for accurate slitting and ringing



Jonard - AST-200 - CableSaber - Mid Span Slit & Ring Tool - NTFTFO000150

Used to gain mid-span access to armored or thick jacketed cables 0.157" - 1.125" (4 - 28.6mm) in diameter.

Key Features:

- Adjustable blade depth up to 0.216" (5.5mm)
- Precision steel blade will cut through the toughest materials, ensuring no damage to the internal fibers
- Blade can be set to be longitudinal for slitting or radial for ringing



Jonard - FOD-2000 - Fiber Optic Drop Cable Slitter - NTFTFO000219

Simplifies the slitting of drop cable jackets at mid-span or end sections and perfect for FTTH technicians working with flat fiber drop cables.

Key Features:

- Slits flat cables 0.305" to 0.350" wide and 0.155 to 0.185 inch high
- Slits both sides of the jacket, separating the jacket and strength members from the buffer tube leaving fiber undamaged
- Two reversible blades come preassembled

Part #	Groove Size Range
MS-306 - NTFTFO000143	1.2 - 3.3mm
MS-316 - NTFTFO000103	2.9 - 6.8mm
MS-326 - NTFTFO000104	5 - 10mm
MS-426 - NTFTFO000153	5.8 - 12mm
MS-526 - NTFTFO000083	9.8 - 18.2mm

FTTH Tools



Milwaukee - M18 FUEL™ Compact Router - NTFTPT000059

Delivers clean accurate cuts in a variety of materials and applications. The M18 REDLITHIUM XC5.0 battery provides users with all-day run time.

Key Features:

- Variable-speed dial with speeds from 10,000 to 31,000 RPM
- Sturdy 4" sub-base plate for stability
- Compatible with the most ZIDS, including the **GMP - 70464** - Zip Inner Duct Slitter



Milwaukee - M18 FUEL™ 7/16" Hex Utility High Torque Impact Wrench - NTFTPT000071

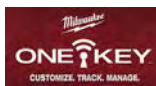
With ONE-KEY™, delivers the fastest drilling speed, brushless motor for more power, and is built for maximum control.

Key Features:

- Easily remove rusted and corroded hardware with up to 750ft-lbs max torque
- Equipped with a QUIK-LOK™ chuck, providing faster and easier bit changes



Milwaukee's Series of M18 FUEL™ tools combine advanced hardware and software. REDLINK™ PLUS Intelligence enables advanced communication between batteries and tools, allowing for unmatched levels of performance, protection and productivity.



Built on the principles of CUSTOMIZE, TRACK and MANAGE, ONE-KEY™ combines tool and software technology. A cloud-based program, providing a clear view of all inventory from a central location while allowing the ability to track tools and equipment.



GMP - 70464 - Zip Inner Duct Slitter (ZIDS) - NTFTPA000030

The fastest, safest, and handiest device for inner duct splitting currently on the market. The inner duct splitter can cut through pipe walls within seconds and with little effort.

Key Features:

- Cuts 5/16" channel through duct allowing easier spreading of duct to remove cable
- Time Saver: More than 5X faster compared to traditional duct cutting methods
- 20' duct can be easily cut within 1 minute



Milwaukee - 48-89-4631 - SHOCKWAVE Impact Duty Drill Bit Set - NTFTPT000058

Engineered for extreme durability and long life. The QUAD EDGE™ tip delivers a precision start and features four cutting edges to create smaller chips for faster material removal and less heat leading to improved performance.

Key Features:

- VARIABLE HELIX™ flute designed for rapid chip removal
- Thicker tapered web design increases bit strength
- 1/4" hex shank for use with impact drivers and drill drivers



Milwaukee - 48-22-9040 - 4in1 Lineman's Hammer

Both milled and smooth strike faces, built-in staple pullers, and a J-hook remover delivers added functionality.

Key Features:

- Handle is made of high-strength fiberglass and has reinforced overstrike protection
- Integrated, tether-ready lanyard hole for when working at height



Milwaukee - 48-13-7X - Bellhanger Bits - NTFTPA000060

Install small wire systems easily and efficiently. Designed for installing all types of small wire systems including fiber optic cable, data, and telecom cable. Provides extra reach where needed and a hole in the tip to help pull wires through holes. Available in 12, 18, and 24", and multiple diameters for every application.

Key Features:

- Versatile: Provides a pull-through hole in the tip for easy installation of small wire systems
- High-speed drilling: Features an aggressive tip geometry and coated flutes for fast cutting and debris removal
- Reduced slipping: 3-Flat Secure-Grip™ shank holds the bit firmly in the drill chuck



Milwaukee - 2579-20 - M12™ Stick Transfer Pump

Delivers superior filtration for uninterrupted pumping in hand holes, catch basins, water meter boxes, trenches, sump pump pits, and more. The 36" submersible aluminum barrel provides the extension needed to reach water at the bottom of underground enclosures, trenches, and difficult to reach areas.

Key Features:

- 360° filter maximizes flow in heavy debris, minimizing downtime caused by clogging
- Eliminates repetitive manual pumping
- 5' max head height and an outlet compatible with a standard 3/4" garden hose
- Delivers the power to push water farther - out of enclosures and basins, over walls, and to the deposit location

FTTH Tools Kits

Netceed - Fiber Prep Splicing Kit - NOSPMC000140

The **Netceed Fiber Prep Splicing Kit** is crafted to accommodate the demands of technicians with precision and efficiency. Featuring our most popular slitting, ringing, stripping, and cutting tools, this kit provides a large range of tools needed to access and prepare fiber optic cables for FTTH installation and termination.

Contents of the Netceed Fiber Prep Splicing Kit include:



Netceed has a selection of **FTTH Tool Kits** with tools selected for each unique project, including:

- Ultra Basic Hand Tools
- Duct & Cable Hand Tools
- Fiber Prep Splicing Kit
- Light Fiber Test Kit
- Advanced Fiber Test Kit

The CLAMP-GUN™ M12™	FI-60 Live Fiber Identifier	SmartClass Fiber OLP-87 G-PON / XG(S)-PON	4100-Series FiberComplete PRO OTDR Kit
EME Guard XS	INX 760 Microscope Kit	SmartClass Fiber OLP-88 G-PON	NSC-200 Ookla Speedtest
	MU1312X-YY	Optimeter G-PON / XG(S)-PON	Handheld Network Test Platform
	SmartOTDR	OCC-4056C DWDM Optical Channel Checker	ASK306-LP AirScout WiFi Tester 6
	DWDM OTDR Module	MUL-OPM-XGPON-VFL-400	Cable & Pipe Receiver w/ Transmitter
	FTH-5000 Compact Fiber Test Head	Optical Dispersion Measurement Module	RM 35 Digital Cable Length Measuring Device
	MU1299E OTDR	OTDR Launch Box	330' Laser Distance Meter



Milwaukee - M18 FUEL™ 2-Tool Combo Kit - NTFTPT000078

These kits are fully equipped with a selection of tools, batteries, a durable case, and a charger. Whether starting out or expanding an existing collection, Netceed offers a range of Milwaukee tools and tool kits from 2-piece to 6-piece sets, making FTTH deployments easier and more efficient.

Includes:

- 1 x M18 FUEL 1/2" hammer drill
- 1 x M18 FUEL 1/4" hex impact driver
- 2 x M18™ Redlithium™ XC 5.0AH Battery
- 1 x M18 and M12 multi-voltage charger
- 1 x Side handle
- 1 x Heavy-duty case

Key Features:

- POWERSTATE™ Brushless motor delivers unmatched power for full range of capabilities to complete the widest variety of applications
- Increase productivity on the jobsite with the fastest driving speed of any impact driver without sacrificing power or control



Jonard - TH-121 - Fiber Prep Kit+ - NTFTFO000087

Featuring Jonard's most popular slitting, ringing, stripping, and cutting tools, This kit provides a large range of tools needed to access and prepare fiber optic cables for termination in FTTH applications.

Includes and Key Features:

- 3-hole Fiber Optic Stripper - Strips the 1.6-3mm fiber jacket, 600-900 micron buffer coating, and 250 micron coating of fiber cables to expose the 125 micron glass fiber
- Wire and Kevlar Cutting Shears perfect for cutting Kevlar, cabling insulation, tape, cable ties, and other materials with ease
- Buffer Tube Ringer, Drop Cable Slitter, Mid-span Slit & Ring Tool, Round Cable Slit & Ring Tool - to slit and ring a variety of fiber optic cables
- Also includes pliers, fiber wipes, flashlight, and multi-bit screwdriver - all in convenient rugged case



Buffer Tube Ring tool provides quick access to fibers inside buffer tubes



Flat Drop Kit

Ripley - MA03-7046 - FTTX Flat Drop End Prep Kit - NTFTFO000136

Ripley - MA03-7043 - FTTX Ultra Light Weight Drop End Prep Kit - NTFTFO000167

Featuring a complete range of tools for rapid, measured jacket stripping, toner wire slitting, fiber stripping, loose tube scoring, strength member cutting, and both Kevlar and fiberglass trimming - everything a fiber installer needs to strip and prep flat drop FTTX cables.



ULW Kit

FTTX Flat Drop Kit includes:

- MB03-7120 for toner wire
- MB04-7000 for jacket stripping
- FTS for loose tube scoring
- CFS-3 for fiber stripping
- MA04-7001 cutter for strength members
- KS2 for Kevlar and fiberglass trimming

FTTX Ultra Light Weight (ULW) Kit includes:

- MB04-7020 for ULW jacket stripping
- FTS for loose tube scoring
- CFS-3 for fiber stripping
- MA04-7001 cutter for strength members
- KS2 for Kevlar and fiberglass trimming

Cable Pulling, Fishing & Rodding



Condux - Fiber Optic Cable Puller - NTCPFO000059

Consists of a hydraulic motor, variable speed foot control, manual flow control valve for adjusting maximum speed, and a manually adjustable pressure relief valve for adjusting the ultimate pull tension.

Key Features:

- Load cell torque input for the most accurate tension measuring
- Not affected by changes in oil temperature, component age, and power source
- Does not need to be recalibrated under different weather condition



Condux - 30" Capstan for Cable Puller - NTCPFO000060

To conform to the many specifications of fiber optic cable available, and to offer more cable pulling capabilities, Condux offers several sizes of capstans that fit the **Fiber Optic Cable Puller**. These bayonet style capstans are offered in 12", 30", 42", and 50" diameters for a standard 27/16" diameter bayonet style shaft.

Key Features:

- Used is for pulling innerduct power, telephone, or fiber and coaxial cables
- Conforms to the specifications of fiber optic cable available



Condux - 08675702 - 13HP Portable Hydraulic Power Pack - NTCPFO000056

Matches perfectly to the power requirements of both the Condux Fiber Optic Cable Puller and Cable Blower. Utilizing a small footprint, the 13hp Power Pack features a variable flow switch (from 5 to 8gpm) to ensure that every job can be covered with just one machine.

Key Features:

- Variable Flow
- Gel Filled Battery
- Foam Filled Tires



Condux - Mini Corner Cable Guide - NTCPUG000286

A versatile tool designed to aid pulling through manholes, vaults, pull boxes, handholes, and more.

Key Features:

- Hardened steel rollers
- Designed to protect polyester ropes, tapes and even steel winch lines during pullback operation
- 10,000 lb. cable tension load capacity



Jameson - 11A-25-500M - Good Buddy® II Duct Conduit Rodder - NTFRDR000484

The Good Buddy® family of rodders will rod or fish conduit 2-4" in diameter. Designed to meet various applications for 3/8" rod, including manhole-to-riser, riser-to-riser, cable vaults and large conduit runs. Round, flexible rod slides easily over wires in occupied conduit. Exceptional bending strength for maneuvering tight turns. Will not kink.

Key Features:

- Increased rod length for longer runs
- Accessories attach to rod for greater versatility and easier fishing
- 7" Bend Radius
- 1,000lb pull/tensile strength
- Frame handle and wheels for transport
- Friction brake and safety roller feed
- Available in 3/8" x 400, 500, 600, and 1,000' lengths



GMP - 88272 - Toneable Duct Rodder - NTCPDR000001

Detectable duct rods are used to find, follow and accurately map the duct route without digging or trenching. The traceable duct rod is used in conjunction with both a signal transmitter and a receiver. The easily identifiable signal is transmitted along the entire length of the duct rod.

Key Features:

- Large internal copper conductor
- Premium rod material
- Can be used with a sonde (radio transmitter that are used to locate non-metal underground utilities)
- Used with traceable rod detection transmitter and receiver



Jonard - FTS-240 - Fish Tape - NTFRDR000431

Klein - 56335 - Fish Tape - NTFTHT000410

Netceed stocks a wide range of fish/draw tape in various lengths and widths. Designed for easier payout and rewind, perfect for pulling wire or cables through conduit and walls.

Key Features:

- Made from a high strength spring steel to handle heavy-duty wire pulls with ease
- Laser-etched with measurement markings at every one foot (0.3M)
- Case and handle are made for high-impact resistance
- Two viewing ports allows visibility to how much tape is left in the case



Cable Winding, Rolling & Measurement



Runpotec - XB 500/500T - X BOARD Profi-Cable Roller - NTFTMH000042

Universal professional cable drum winder and unwinder for all types of cables and pipes (core cables, cable rings, cable drums, empty pipes, ropes, and cable drums). Enables trouble-free and efficient work without tangled cables. The compact platform X BOARD 'T' is enhanced with a telescopic extension.

Key Features:

- Holds up to 1,760lbs (800kgs) and fits almost every type of drum
- Especially suitable for damaged cable drums
- The 6 fold-out telescopic support extensions on the 'T' version can be extended 31.5"
- Includes: Box for tools, wear parts and consumables (seals, lubricant, etc.), set of tools, speed and distance indicator, air hose and stop valve to connect to compressor.



X BOARD 500T is enhanced with 31.5" telescopic extensions to the base of the unit.

Pre-terminated FTTH Multiports



Runpotec - XB 500-FTTX - X BOARD 500 with Pre-terminated FTTH Multiports

Includes the ability to manage a pre-terminated multiport terminal that fits on top of the unit between the handles.

The innovative FTTH Multiport terminals are designed for use in outside plant fiber access networks providing sealed environmental protection and fast, easy, incremental connection of subscriber drop cables while increasing deployment velocity. Its reliability and flexibility make it the ideal choice for network access point terminals in FTTH and access network deployments.



Runpotec - XB 300 and Multifunction Mandrel Set - NTFTMH000055

Like the X BOARD 500, the X BOARD 300 is for small to medium cable drums. The multifunction mandrel has been specially developed for the XB 300 cable rolling system. Loose cable bundles can also be rolled by attaching them to the stainless steel center mandrel and folding out the 4 side brackets.

Mandrel Features:

- Used in combination with XB 300 and XB 500
- Can be loaded up to 661 lbs (300kg)
- Allows loose cable bundles and individual wires to be rolled
- Telescopic center mandrel extends up to 1' (294mm)



Runpotec - RM35 - Runpometer Digital Cable Length Measuring - NTFTMH000066

A digital cable length measuring device used to precisely measure cables, single conductors, ropes, pipes, or hoses with a diameter of 2 to 32mm. It is water, dust, and extremely shock-resistant - ideally suited for the job site. A countdown function is also included, which can be used to measure predetermined cable lengths.

Key Features:

- Easily connected to the XB 300/ 500 cable system via the supplied belt and clip
- 2 totaling buttons can be used to add up the measured values

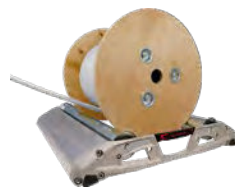


Runpotec - PRO 670 - Cable Drum Roller - NTFTMH000065

The innovative quality cable drum unwinder is made of light and solid die-cast and continuous-cast aluminum. With robust, adjustable support rollers, it is also excellently suited for the highest loads of up to 474 lbs (215kgs) in daily use. The support rollers with spring core axles can be easily and quickly adapted to the different cable drum sizes up to max. 3.3' (1m) by adjusting the distance to 85, 160, 225, 290, 310, and 335mm.

Key Features:

- Light and solid aluminum die casting and continuous casting for maximum stress in daily use
- Adjustable support rollers for drums up to 3.3' (1M)
- Robust, sealed support rollers
- Guaranteed maintenance-free operation



U-TECK - 59020 - Fiber Coil Turntable

For use in the field when fiber coil deployment is difficult, and there is a MFT/MST attached to the coil. Can be used for loose terminated coils of up to 1,500' (457M).

Key Features:

- Reduces fiber coil spring back
- Easily adjustable for multiple coil sizes
- Rubber cleats affixed underneath to prevent slipping
- Metal stakes included for when working in grass, dirt, sand, etc.
- Adjustable brake for increasing tension and reducing drag & backlash
- Alignment guides for determining proper ID





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Worldwide telecom & broadband partner for deployment of next generation networks and technological value-added services.



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countries of
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domestically



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dedicated team
members dedicated
to customer
satisfaction &
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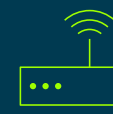
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network product
deliveries per year,
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locations globally
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of corporate
offices, logistics &
distribution centers,
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distributed
annually



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