

TRAFFIC & SIGNALING PRODUCT CATALOG

EVERYTHING NEEDED FOR THE INTERSECTION AND BEYOND

2024

EVERYTHING NEEDED FOR THE INTERSECTION AND BEYOND

Netceed is a Full-line Stocking Distributor of Traffic Control and Broadband Equipment with More than 30 Years of Expertise and Performance

Netceed is a global leader and one-stop shop with a comprehensive portfolio of network core to service delivery edge materials, complete end-to-end solutions, and value-added services with unmatched traffic control, telecom, and broadband industry expertise. Leveraging our intelligent distribution systems, state-of-the-art supply chain solutions, and customized products and services, we're redefining what a materials distributor and value-added services provider can be and do for our customers. Our unwavering focus is on increasing the speed and reliability of supply chains to open new possibilities for our customers:

- More certainty in supply availability, on-time delivery, and total cost of ownership (TCO)
- Transformative agility and efficiency for their organizations
- Technical expertise and experience in advanced technology and traffic infrastructure solutions
- Enabling the future of connectivity with global reach and scaling potential

We are Keenly Mindful of Local APL and DOT Regulations

We only represent manufacturers that produce the highest quality local, state and federally approved and compliant products, made from materials that will stand the test of time. This is our commitment to you, and we stand behind it everyday.



Streamlined Nationwide Distribution and Shipping

Netceed frequently offers the convenience of same-day shipping from our extensive network of nationwide distribution centers. Our inventory encompasses a comprehensive range, spanning traffic signal hardware and equipment, building wire, fiber optic, coax, composite camera cable, and a complete selection of associated accessories.

Our goal has always been to create and distribute reliable, high-quality and innovative products for the best prices - and keeping customer service our #1 priority.



SUSTAINING MEMBER Since 2001

Netceed is Proud to be a Sustaining Member of the IMSA Since 2001

The International Municipal Signal Association (IMSA) is dedicated to providing quality certification programs for the safe installation, operation and maintenance of public safety systems.

TABLE OF CONTENTS

TRAFFIC SIGNAL WIRE & CABLE	PAGE
IMSA CABLE - SIGNAL CABLE, LOOP DETECTOR WIRE	4
VIDEO DETECTION CABLE - COMPOSITE CAMERA CABLE, MULTI-CONDUCTOR CABLE, PRECISION VIDEO CABLE	5
BUILDING WIRE - RHH / RHW-2 - USE-2, XHHW / XHHW-2, THHN / THWN-2, PE-39 INTERCONNECT	6
STRAND WIRE	7
TRAFFIC CAMERA / SENSOR CABLE - CAT5E Direct Burial STP (Waterproof) CMX	8
SIGNAL & SIGNAL HARDWARE	
TRAFFIC & PEDESTRIAN SIGNALS, HOUSING & ACCESSORIES	9
EVERYTHING NEEDED FOR THE INTERSECTION AND BEYOND	11
POLE LINE HARDWARE	12
PEDESTRIAN CROSSING HARDWARE	13
MAST-ARM HARDWARE	14
HARDWARE, TOOLS & ACCESSORIES	
CABLE PULLING & BLOWING	15
TRAFFIC SIGNS & MARKERS	18
HDPE CONDUIT & ACCESSORIES	19
SEALANT & LOOP ACCESSORIES	20
PULL BOXES	21
ROADWAY SAFETY	22
FIBER TOOLS & ACCESSORIES	23
HFC & FIBER OPTICS	
CONNECTIVITY SOLUTIONS FOR TRAFFIC MANAGEMENT SYSTEMS	24
FIBER OPTICS	
CABLE - ADSS / ADSS-ASU, ARMORED & DROP	26
PASSIVES	27
FUSION SPLICERS	30
TOOLS & TOOL ACCESSORIES	32
CONSUMABLES	34
LINE CARD	36
RESOURCES	37

Netceed is also a sustaining member and/or affiliated with multiple associations and communities in the industry including these, and more:

Satellite Broadcasting &

Communications Association









TRAFFIC SIGNAL WIRE & CABLE

IMSA CABLE - SIGNAL CABLE

Wire And Cable For:

- Video Detection
- Traffic Signals
- Loop Detection
 Street Lighting
- s Street Lighting



Netceed is a proud sustaining member of the IMSA since 2001. We offer a wide range of products for various municipal

transportation applications: Traffic Communication, Inductive Loop Detection and Traffic Signal Control.

Manufactured in ISO-certified facilities, Netceed stocks state-specific cable of unsurpassed quality and reliability to ensure product consistency for every specification.

19-1 & 20-1 Signal Cable

Parameter	Specification
Conductors	Solid or Stranded, bare copper
Insulation	Polyethylene
Color code	Per specification
Conductor configuration	Cabled conductors
Shield	None
Jacket	Spec 19-1 - PVC Spec 20-1 - Black PE
Operation mode	Full auto, semi-auto, manual



IMSA CABLE - LOOP DETECTOR WIRE



	-
Spec 51-1 / 51-3	Specification
Conductors	Solid or Stranded, bare copper
Insulation	Spec 51-1 - PVC / Nylon Spec 51-3 - Black cross-linked polyethylene
Conductor configuration	Single conductor
Spec 51-5 / 51-7	Specification
Conductors	Stranded, bare copper
Insulation	Spec 51-5 - PVC / Nylon Spec 51-7 - Black cross-linked polyethylene
Conductor configuration	Single conductor
Outer jacket	Black PVC or polyethylene tube
Spec 50-2	Specification
Conductors	Solid or Stranded, tinned copper
Insulation	Polyethylene
Color code	Black / Natural
Conductor configuration	Twisted pair
Shield	Aluminum / Mylar tape
Outer jacket	Black low-density polyethylene

TRAFFIC SIGNAL WIRE & CABLE

VIDEO DETECTION CABLE

Netceed is a leader in custom designed cable manufacturing and special wire construction. If a standard cable won't work for your application, we can design a cable customized to match your exact specifications. Whether you need a custom coaxial cable, special power cables or a completely new cable designed from scratch, we can provide a custom cable to fit your needs.



Composite Camera Cable

Specification - Element 1	Specification - Element 2		
One Component 23 AWG 4 UTP Cat 6	14 / 16 AWG 3C Shielded Cable		
Jacket - PVC	Component 1 - 14 / 16 AWG 19 Strands Class C		
Diameter - 0.23"	Material - Annealed BC		
Ripcord - Nylon	Conductor Count - 3 Conductors		
Color - Blue with standard UL print	Color Code - Black, White, Red		

Features:

- Save Time and Money: Pull only one cable to camera locations
- Power Options: Use the CAT6 (POE) or the shielded power cable
- Capable of volume control, audio/video, data transfer, networking
- Sunlight resistant and riser rated
- For security cameras and other applications
- Made in the USA

Specification - Coax	Specification - Multi-Conductors
Conductors - 20 AWG Solid BC	Component 1 - 16 AWG BC
Braid - 2 x 98% TC	Insulation - PVC .030 Nominal
Jacket - LDPE .304 Nominal	Jacket - PVC .030 Nominal
	Color Code - Black, White, Green
Specification - Coax	Specification - Multi-Conductors
Conductors - 20 AWG Solid BC .032	Component 1 - 16 AWG BC
Braid - 95% BC	Insulation - PVC
Jacket - PVC .224 Nominal	Jacket - PVC .030 Nominal
	Color Code - Black, White, Red, Brown, Blue



Multi-conductor Camera Cable

Specification	Parameter
Conductors	Stranded Tinned Copper
Insulation	16/18 AWG
Jacket	PE/PVC
Fillers	Nylon
Voltage Rating	600 V
Temperature Rating	90° C
Color Code	Black, White, Green

Precision Video Cable

Specification	Parameter
Conductors	20AWG Solid Bare Copper
Braid	2 x 98% TC
Jacket	Polyethylene
Color Code	Black

BUILDING WIRE



RHH/RHW-2 - XLP USE-2

Description: Single conductor, 90°C Wet/Dry. Insulated with chemically cross-linked polyethylene insulation.

Applications: Appropriate for use in general purpose wiring for lighting and power - residential, commercial, and industrial buildings. Suitable for applications that require superior flame retardance.

Construction: Conductors: 14AWG - 500 MCM fully annealed stranded bare copper per ASTM B3. Class B Stranding per ASTM B8.

Common Features:

- 600 Volt, Copper conductor
- High-heat, moisture, and sunlight resistant
- All size variations available

XHHW / XHHW-2

Description: Single conductor, 90°C Wet/Dry. Insulated with chemically cross-linked polyethylene insulation.

Applications: Appropriate for use in general purpose wiring for lighting and power - residential, commercial, and industrial buildings. Suitable for use in low leakage circuits requiring a dielectric constant of 3.5 or less.

Construction: Conductors: 14AWG - 500 MCM fully annealed stranded bare copper per ASTM B3. Class B Stranding per ASTM B8.

DID YOU KNOW? Netceed can help you find the products to pull or blow building wire through HDPE conduit. See **Condux** on page 15 for more information.

THHN / THWN-2

Description: Single conductor stranded bare copper, with a PVC insulation and Nylon Jacket **Applications:** Appropriate for use in general purpose wiring for lighting and power - residential, commercial, and industrial buildings. Suitable for use with machine tool and appliance wiring.

Construction: Conductors: Uncoated fully annealed stranded bare copper per ASTM B3. Class B Stranding per ASTM B8.

PE-39 INTERCONNECT



General Cable is one of three levels of the Prysmian Group, which has a multibrand architecture.



PE-39 Interconnect Cable is manufactured for direct burial communication system applications in accordance with the National Electric Code.

- Intended for duct and direct buried installations where protection against water and moisture entry is required and may also be installed aerially
- Conductors: Solid, annealed copper; sizes 19, 22, and 24 AWG
- Insulation: Solid, high density polyethylene, colorcoded in accordance with telephone industry standards
- Twisted Pairs: Insulated conductors are twisted into pairs with varying lay lengths to minimize crosstalk



TRAFFIC SIGNAL WIRE & CABLE

STRAND WIRE



BEKAERT



National Strand has built an unbeatable reputation. The superior qualities of National Strand's products provide exceptional reliability and long life for guy wires, overhead ground wires, and messenger cables.

Product Offerings:

- Galvanized Steel Strand
- Structural Bridge Strand
- Stainless Steel Strand
- Galfan Coated Steel Strand
- Guard Rail Cable
- Barrier Strand

Guying, static/grounding applications in power utility, messenger/ telecommunications/CATV for years by the most demanding North American IOU's, muni's, co-ops, MSO's and others. All strand

products are expertly produced to ASTM A475, A363, A855, A925, A111, A586, CSA.

National Strand was the first in the industry to devise color coded end caps for easy grade identification.

UTILITIES

COMMON

SIEMENS-MARTIN

HIGH STRENGTH

EXTRA HIGH STRENGTH

BRIDGE STRAND

GALFAN

Galvanized and Galfan Coated Guy & Static Wire										
Calvanized Steel Strand Minimu				n Break Strength in Pounds				Min. Weight of Coating Oz./Sq. Ft.		
Strand Diameter Inches	Coated Diameter Inches	Wires Per Strand	Utilities Grade	Common Grade	Siemens- Martin Grade	High Strength Grade	Extra High Strength Grade	Class A	Class B	Class C
1/4	0.12	3	3150	1860	3040	4730	6740	0.85	1.7	2.55
1/4	0.12	3	4500	-	-	-	-	0.85	1.7	2.55
5/16	0.145	3	6500	2490	4090	6350	9100	0.9	1.8	2.7
3/8	0.165	3	8500	3330	5560	8360	11800	0.9	1.8	2.7
3/16	0.062	7	-	1150	1900	2850	3990	0.5	1	1.5
3/16	0.065	7	2400	-	-	-	-	0.5	1	1.5
7/32	0.072	7	-	1540	2560	3850	5400	0.5	1	1.5
1/4	0.08	7	-	1900	3150	4750	6650	0.6	1.2	1.8
9/32	0.093	7	4600	2570	4250	6400	8950	0.7	1.4	2.1
5/16	0.104	7	-	3200	5350	8000	11200	0.8	1.6	2.4
5/16	0.109	7	6000	-	-	-	-	0.8	1.6	2.4
3/8	0.12	7	11500	4250	6950	10800	15400	0.85	1.7	2.55
7/16	0.145	7	18000	5700	9350	14500	20800	0.9	1.8	2.7
1/2	0.165	7	25000	7400	12100	18800	26900	0.9	1.8	2.7
9/16	0.188	7	-	9600	15700	24500	35000	1	2	3
5/8	0.207	7	-	11600	19100	29600	42400	1	2	3
1/2	0.1	19	-	7620	12700	19100	26700	0.7	1.4	2.1
9/16	0.113	19	-	9640	16100	24100	33700	0.8	1.6	2.4
5/8	0.125	19	-	11000	18100	28100	40200	0.85	1.7	2.55
3/4	0.15	19	-	16000	26200	40800	58300	0.9	1.8	2.7
7/8	0.177	19	-	21900	35900	55800	79700	0.9	1.8	2.7
1	0.2	19	-	28700	47000	73200	104500	1	2	3

netceed.com | 800-423-2594 | hello.us@netceed.com

TRAFFIC SIGNAL WIRE & CABLE

TRAFFIC CAMERA / SENSOR CABLE

CAT5E Direct Burial STP (Waterproof) CMX

Description: Category-5E Direct Burial, STP w/Drain Wire, 8-Conductor, Waterproof Outdoor Jacket, 24AWG Solid-Bare Copper. This cable that is rated for direct burial applications and is designed to be buried directly beneath the ground without any additional protection, piping, or sheathing. Direct burial cable is built to tolerate heat, moisture, and other hazards that present themselves when cable is buried underground.



Features:

- High-performance data communications cable
- 350MHz Bandwidth for data applications, fast Ethernet, and 155Mbps TP-PMD/CDDI
- Category-5E shielded twisted pair
- Easily identified color-striped pairs
- 24AWG solid copper conductors
- Exceeds TIA/EIA-568B.2, ISO/IEC 11801
- CAN/CSA -C22.2 No. 214
- Direct burial (waterproof)
- ETL listed

Electrical Characteristics	
1.0 - 100.0MHz Impedance (Ohms)	100±15
1.0 - 350.0MHz Delay Skew (ns/100m)	<=45
Pair-to-Ground Capacitance Unbalance (pF/100m)	<=330
Max. Conductor DC Resistance 20°C (ohms/km)	88.5
Resistance Unbalance (%)	<=5

Freq.	Ret. Loss (Min dB)	Att Max (db/100m)	Next (ns/100m)	PSNext (Min dB)	ELFEXT Min (dB/100m)	PSELFEXT Min (dB/100m)
1	20.0	2.0	68.3	62.3	63.8	60.8
4	23.0	4.1	59.3	53.3	51.7	48.7
8	24.5	5.8	54.8	48.8	45.7	42.7
10	25.0	6.5	53.3	47.3	43.8	40.8
16	25.0	8.2	50.3	44.3	39.7	36.7
20	25.0	9.3	48.8	42.8	37.7	34.7
25	24.3	10.4	47.3	41.3	35.8	32.8
31.25	23.6	11.7	45.9	39.9	33.9	30.9
62.5	21.5	17.0	41.4	35.4	27.8	24.8
100	20.1	22.0	38.3	32.3	23.8	20.8
200	18.0	32.4	33.8	27.8	17.7	14.7
300	16.8	41.0	31.2	25.2	14.2	11.2
350	16.3	44.9	30.1	24.2	12.9	9.9

Parameter	Specification
Rated Temperature	75° C (167°F)
Rated Voltage	300V
Flammability Test	IEC-332-1
Product Standard Certification	СМХ
Conductor	Solid Bare Copper
Size	24 AWG (0.51mm)
Insulation	PE
Average Thickness (mm)	0.208
Insulation Diameter (±0.005mm)	0.91
Twisted Pair Diameter (±0.01)	1.92
Assembly Diameter	3.80
Assembly Diameter Inner Jacket (Gray)	3.80 PVC
Inner Jacket (Gray)	PVC
Inner Jacket (Gray) Average Thickness (mm)	PVC 0.40
Inner Jacket (Gray) Average Thickness (mm) Min. Point Thickness (mm)	PVC 0.40 0.36
Inner Jacket (Gray) Average Thickness (mm) Min. Point Thickness (mm) Outer Diameter (±0.10mm)	PVC 0.40 0.36 4.80
Inner Jacket (Gray) Average Thickness (mm) Min. Point Thickness (mm) Outer Diameter (±0.10mm) Aluminum Foil	PVC 0.40 0.36 4.80 Yes
Inner Jacket (Gray) Average Thickness (mm) Min. Point Thickness (mm) Outer Diameter (±0.10mm) Aluminum Foil Drain Wire (Tinned Cooper)	PVC 0.40 0.36 4.80 Yes 7/0.16
Inner Jacket (Gray) Average Thickness (mm) Min. Point Thickness (mm) Outer Diameter (±0.10mm) Aluminum Foil Drain Wire (Tinned Cooper) Outer Jacket (Black)	PVC 0.40 0.36 4.80 Yes 7/0.16 LSZH (UV)
Inner Jacket (Gray) Average Thickness (mm) Min. Point Thickness (mm) Outer Diameter (±0.10mm) Aluminum Foil Drain Wire (Tinned Cooper) Outer Jacket (Black) Average Thickness (mm)	PVC 0.40 0.36 4.80 Yes 7/0.16 LSZH (UV) 0.60
Inner Jacket (Gray) Average Thickness (mm) Min. Point Thickness (mm) Outer Diameter (±0.10mm) Aluminum Foil Drain Wire (Tinned Cooper) Outer Jacket (Black) Average Thickness (mm) Min. Point Thickness (mm)	PVC 0.40 0.36 4.80 Yes 7/0.16 LSZH (UV) 0.60 0.54

Pair 1: Blue, White-Blue, Pair 2: Orange, White-Orange Pair 3: Green, White-Green, Pair 4: Brown, White-Brown

Mechanical Characteristics					
Test Object	Jacket				
Test Material	LSZH (UV)				
Before - Tensile Strength (Mpa)	>=13.8				
Aging - Elongation (%)	>=100				
Aging Condition (°Cxhrs)	100 x 168				
After - Tensile Strength (Mpa)	>=85% of unaged				
Aging - Elongation (%)	>=50% of unaged				
Cold Bend (-20±2° Cx4hrs)	No Crack				

netceed.com | 800-423-2594 | hello..us@netceed.com

TRAFFIC & PEDESTRIAN SIGNALS, HOUSINGS & ACCESSORIES



Built to last in any environment, Swarco McCain offers an extensive signal portfolio for most applications. The full line of solutions includes traffic signals, pedestrian signals, and signal accessories.

Traffic Signal Housings provide a durable and low-maintenance housing for standard LED modules as well as incandescent optical assemblies. Housings are compliant with the Institute of Transportation Engineers (ITE), Caltrans, and most state Departments of Transportation.



Traffic Signal Housing Features:

- Poly and Aluminum
- Increase product durability in extreme or high-wind conditions
- Corrosion resistant and low maintenance
- Modular sections, one-piece, injection molded or cast
- 72-tooth serrated boss and reinforcing ribs, top and bottom
- Housings have a cast boss for mounting a 5 or 6-position terminal block; one side of terminal block with fast-on terminals, the other side with screw terminals



Pedestrian Signal Housings Features:

- Poly and Aluminum
- Superior strength and durability
- Increase visibility and impact protection
- Use in any environment
- Remove, reverse or permanently attach door-hinge hardware
- Stainless steel hardware
- Terminal block

Netceed Stocks Swarco McCain Products, Including:

- Cabinets
- Controllers
- Backplates
- Tunnel Visors
- Signs
- and more...

OURALIGHT

GE has been manufacturing traffic signals and commercial traffic products almost since their invention. These manufacturer's LED signal modules not only meet the specifications of ITE and many

states/local government agencies, but also are certified by ISO9001 Quality Control System. LED traffic signal modules exceed the highest level of specifications set forth by federal, state, and local government agencies.



LED Traffic Signal Features:

- Compliance with latest ITE specifications
- Low power consumption & long operating lifetime LEDs
- Retrofit design & UV stabilized lens
- Full compatibility with NEMA controllers/conflict monitors
- Uniform incandescent appearance



Pedestrian Countdown Lamp Features:

- Compliant with the latest ITE specifications
- Retrofit design & UV stabilized lens
- Fully compatible with NEMA controllers/conflict monitors
- Conforms to standards specified in ITE LED Pedestrian Signal Modules

TRAFFIC & PEDESTRIAN SIGNALS, HOUSINGS & ACCESSORIES



Pelco's manufacturing standards and reputation for excellent customer service have made them a leader in the industry. From creation to production, Pelco ensures their products are of the highest quality and made from materials that are built to last.



Netceed Stocks Engineered Casting by Pelco

Adding Engineered Castings products to its extensive product line, Pelco Products has expanded to encompass all types of mounting hardware, including rigid and free-swinging signal and sign mounts, traffic parts, sign brackets, lighting, flasher cabinets, push buttons, copper theft deterrent products, and much more.

Pelco / Engineered Castings Products also include:

- Astro-Brac Signal Mountings
- Free-Swinging Signal Mountings · Backplates
- Rigid Side-of-Pole
- Rigid Post Top Sign Mountings
 - _
- Pedestrian Push Buttons
- CabinetsBackplates
- Poles & Bases
- Traffic
- Accessories
- Lighting



Pelco's Master-Bracket by Engineered Castings feature all-axis adjustability and are designed to facilitate the mounting of any size signal to any shape mast arm or pole.

AeroFlex Backplates





BK-8000-3-PNC 12", 3-Section Universal

BK-8000-4-RT2-PNC 12", 4-Section Universal with 2" reflective tape

Pelco's innovative flexible backplate design reduces stress to the backplate, signal, signal mount, and mounting structure at elevated wind speeds. AeroFlex Backplates are fabricated from black dual durometer thermoplastics that combine rigidity and flexibility. The universal design will fit most current signal manufactures, while signal specific backplates are available upon request. Available with 2" or 3" reflective borders.

EVERYTHING NEEDED FOR THE INTERSECTION AND BEYOND



POLE LINE HARDWARE

MacLean Power Systems is a leading manufacturer of Pole Line Hardware, connection, and insulation and protection products. Netceed stocks a wide range of MPS products, including:



Strandvise® For deadend applications with overhead or down guy wire. Rated to hold a minimum of 90% of RBS of the strand used.



Cable Suspension Clamps

Cable suspension clamp with curved ends to prevent damage to the messenger.



J8225 Crosby Forged Wire Rope Clip

Crosby Clamps

A strong economical means of securing down guys and wire ropes. The steel U-bolt and malleable iron base are both hot dipped galvanized.



Bolts, Oval Eye Double Arming Eyebolts are forged in a one piece design and are fully threaded the entire bolt length except for 2 inches under the eye. Permanent intersection Oval Eyebolts available.



J1093 3/4" Oval Eye Nut

Eyenuts

Hot Dip Galvanized, the Thimbleye, Twineye and Tripleye are all used with PH-style anchor rods.



Cable Rings & Cable Ring Saddles Designed to support heavy cables. Available in various materials and sizes depending on application.



Can be installed anywhere on the guy wire. Helps protect against stray current.



Square Nuts & Washers Hot-dip galvanized, locks securely into place with little effort, making removal or displacement difficult.



Pulling Grips from Lewis Manufacturing are Wire Mesh Grips that have been a popular and effective means of pulling power cables, fiber optics cables, and ropes overhead or underground and stress free suspension of power and data cables.



Lewis Split Grip Model LSR - Designed for all phases of suspension or pulling, where neither end of the conductor is available and 'middle of the run' application of the grip is desired. Available in 3/4" to 5".

netceed.com | 800-423-2594 | hello..us@netceed.com

PEDESTRIAN CROSSING HARDWARE

Netceed provides **Traffic Signal and Pedestrian Crossing Hardware** that meets the needs of the traffic industry by providing the highest quality products from the industry's most respected manufacturers. Innovative designs lead the way with products that withstand the dynamic effects of nature, while adding value to any project. Netceed is dedicated to meeting the needs of our customers while adhering to regulatory requirements based on quality management principles.





CABLE PULLING & BLOWING

CONDUX

Condux International the premier manufacturer of underground and overhead cable installation tools and equipment for the telecoms and electric power markets. Condux machines allow safe, quick and easy installation of fiber optic cable and power cables.

From Fiber Optic Cable Blowers to Pullers, and Everything in Between

The Condux Gulfstream[™] 400 **Fiber Optic Cable Blower** is designed for the installation of fiber optic cables with diameters from 0.23" to 1.13" into microduct. The Condux Gulfstream[™] 400 Fiber Optic Cable Blower is ideal for "Last Mile" Fiber Installations.

The Condux **Fiber Optic Cable Puller** sets new standards for safe, accurate pulling of fiber optic cables. Only the Condux puller can offer load cell torque input for the most accurate tension measuring available.











Duct Rodders combine ease of operation and reliable performance to help increase the efficiency of your rodding operations. Cages are designed to be lighter weight for easy handling in the field.

Condux currently offers two types of $\textbf{Duct Rod: Python} \ensuremath{\$} \ensuremath{\texttt{and}}$ $\textbf{Mini-Cobra} \ensuremath{\$}$

Each has a glass reinforced composite core jacketed in a rugged plastic coating to ensure long life. Both have excellent flexural strength, compressive strength, fatigue resistance, and memory. They also have favorable electrical and thermal properties that make them safe for use in a cable-occupied duct. Duct rods are suitable for pulling back winch line or small diameter cable.

Python: Best suited for less demanding applications. Heavy-duty outer plastic coating to resist abrasions and reduce wear. Includes one male and one female end fitting and a tapered head.

Mini-Cobra: Includes 3/16" and 1/4" diameter rods used primarily for smaller duct sizes and shorter runs. The rod has the same flexibility and strength features of the Python rod and comes wound in 16" and 24" cages in 50' to 600' lengths. Includes two male end fittings and two tapered heads.

CABLE PULLING & BLOWING

The Condux **Winch Line Blower** is a tool for installing winch line, rope, or pull tape into the conduit. It turns the job of placing winch line into one easy step, eliminating the need to blow a string and pull back a rope.

Features:

- No special tools are required
- Seamless installation
- Condenses air, reducing the number of tools needed
- Premium conduit for steel winch line, tape, and rope

Using compressed air, 90 psi (6.2 bar) and 100 cfm (2.8 cmm), the winch line blower can propel steel winch line, rope, or tape into conduit from 1" to 6" in diameter. Installation is easy. No special tools are required.



Winch Line Blower with 2" Split Threaded Adapter adm 1/2 - 9/16" Rope Venturi



The Condux **Pole Mounting Frame** is used when overhead fiber optic cable installation applications require the smooth hydraulic power and accurate tension measuring system of the Condux Fiber Optic Cable Puller, the Pole Mounting Frame is available. Install the cable puller on the frame with no modifications necessary to the puller. By design, the Pole Mounting Frame offers a secure hold on the cable puller both vertically and horizontally for a worry-free pull. A special plug drives into wood poles for added stability. Includes all mounting hardware.

The Condux **Hitch Mounts** are a fast, easy way to mount the Fiber Optic Cable Puller. The Hitch Mount attaches directly into a typical 2" square Reese-type receiver and the cable puller mounts in a 2V2" square fixture. An adjustable jack is included for added stability and height adjustment. Pulling loads must not exceed 800 lbs.



CABLE PULLING & BLOWING





The Universal Seal-Off Control Valve Body combines with an Individual Innerduct Seal-Off, Single Conduit Seal-Off or Double Conduit Seal-Off and recommended Air Gauge Adapter to form a complete Seal-Off Assembly. The interchangeable attachments provide flexibility by allowing the purchase of a single valve body that can be used in a variety of applications depending on conduit size.



- Standard with an air valve to regulate flow
- Standard claw type air fitting and a 3/16" Rope Adapter

Condux **Cable Chute Line Carriers** are designed to pass through conduit without damaging the conduit or existing cable. To use a Cable Chute Line Carrier you would tie a line or webbing to a chute, insert the chute into the conduit or innerduct, and blow compressed air propelling the chute to the end of the duct.



Included:

- Handmade with the highest quality fabrics nylon or leather
- Goes through a series of quality checks prior to shipping

The **Power Dart Blower** provides a method to install Pull String or Pull Tape into longer duct runs without the need for an air compressor. Utilizing three independent, high volume blower motors, this unit delivers enough to blow 1/2" pull string or pull tape 2,000' into conduit up to 6" in diameter.





The **TurboSlitter** and **Turbo Splitter Pneumatic** from Condux can easily split HDPE pipe with wall thicknesses ranging from 0.097" to 0.216". Available in two styles, pneumatic and cordless drill attachment. The cordless drill attachment quickly adjusts to fit almost any rechargeable drill, 14-volt and larger.

Designed to meet common dimensional specifications, the **Champion Swivels** are designed for underground and overhead cable pulling applications. Clevis pin is easily replaceable. Versatile clevis provides efficient link for several applications. Stainless steel construction with 10,000 lbs. (44,480 N) load capacity.



Champion Swivels

Rope to Rope / Grip Clevis

TRAFFIC SIGNS & MARKERS



A leading manufacturer of **Pipeline Markers, Utility Signs and Marker Posts** with over 25 years of experience in identifying and marking buried utilities. Products are made from formulated engineered resins to perform in harsh weather conditions to identify, prevent damage and dangerous accidents.

Pro-Mark **Poly Signs** are made from specially formulated resin with UV inhibitors and are 100% recyclable. The signs are resistant to chemicals, solvents and stress cracking.

Poly Signs are manufactured in the USA and can be customized to meet customer specifications and U.S. Department of Transportation regulations. Graphics are molded onto our signs with the ProMark graphic system that is guaranteed not to fade, peel or chip. Signs are .125" thick and can be cut in different shapes and sizes. Poly Signs are available in all standard colors.



PRO-MARK Cable and Pipeline Markers







Uticom Systems, Inc., makers of **Compliant Graphics** for harsh environments, has been assisting our clients for more than 30 years in the development, manufacturing and monitoring of their hazard alerting and utility graphics standards, procedures and products.

The mission of Compliant and Durable graphics is accomplished through the Uticom Compliance Monitoring Program.



HDPE CONDUIT & ACCESSORIES



WL Plastics is the premium producer of **High-Density Polyethylene (HDPE)** pipe in North America. HDPE pipe provides durability to avoid the high cost of replacement or rehabilitation. WL Plastics best-in-class manufacturing processes and experienced production personnel help make WL one of the most efficient producers of HDPE pressure pipe in the industry.











Specifications:

- Tensile Strength 1250/1800/2500 lb. (Min)
- Working Load 1250/1800/2500 lb.
- Color White
- Print Color Black
- Pre-lubricated with silicone
- Printed with sequential foot markings

Milliken **Pull Tape** for cable technology, made of low friction, high tenacity – abrasion resistant yarns is a powerful new pull tape that offers unmatched levels of accuracy, legibility, softness and durability. Pull tape improves productivity and reduces total cost by eliminating rework and scrap. The unique Mprint process increases print durability and ensures print length accuracy while our production process ensures a softer feel.

Available in 1250/1800/2500 lb. options and in Standard, Detectable, and Color-coded options.

- Extraordinary print legibility and durability
- 99% print length accuracy
- Increased softness for easier knotting
- Specialty tape offered with a colored thread for easy identification when pulling cable into multiple cells
- Specialty tape offered with a 22AWG detectable wire
 - Packaging: UV resistant white plastic wrap
 - Detectable wire is a 22AWG solid tinned copper conductor, 23 ohms per mile resistance
 - Color coded threads for easy identification available colors: blue or orange

SEALANT & LOOP ACCESSORIES





STAT-A-FLEX® is a two part polyester

resin loop sealant formulated for encapsulating and sealing traffic signal wire in road surfaces. This product can be made to resemble cement coloring as well as black for the desired circumstances. It is easily mixed and applied, and cures quickly, producing a tough weather and chemical resistant seal. STAT-A-FLEX® provides maximum protection of all embedded signal wire, and is approved for use in most state DOT's for public roadway applications.

We also stock V-style Squeegees and replacement blades





3M[™] DBR/Y-6 Series Direct stripped copper wires and

moisture seals the connection for direct-burial applications. The flameretardant kit seals the wiring that is rated up to 600V. It is suitable for water-intensive applications such as golf courses, irrigation controls and outdoor lighting. The kit consists of a 3M[™] Spring Connector R/Y+ and a high impact, UV-resistant tube prefilled with moisture-resistant grease. UL-listed for direct bury and rated for 600V.



Diamond Products Front Pivot Saws are ergonomically designed with optimum weight distribution for the best performance. The handlebars can be set and locked at three different positions for the most comfortable angles during use, and the automatic parking break with hydraulic application gives the user the most control possible. It's heavy-duty wheels have durable polyurethane tread on front wheels and thick rubber tread on the rear to easily glide across different surfaces while cutting.

Diamond Products has a large selection of some of the best cutting, coring, and grinding tools on the market. Their walk-behind concrete saw collection has 6"-60" options for any heavy-duty concrete cutting applications you may have. Between their newer Front Pivot Saws and powerful 71HP Walk Behind Saw, they are equipped to get the job done right every time.



Heavy-duty Cured Concrete Diamond Blade Features:

- Wide variety of diamond depths
- Various segment depths and diamond concentrations
- Fast cutting blades that work well with a wide range of high or low HP saws
- Combines long life performance while maximizing your blade dollars

PULL BOXES



Strength, performance and quality have been hallmarks of all Hubbell underground enclosure brands for more than 40 years. The industry leader for applications in nondeliberate traffic areas, these enclosures provide rugged and cost-effective protection for a variety of electric utility, commercial & industrial, communications, water and gas equipment while meeting the specific demands of our industry.



Polymer concrete cover and base



Polymer concrete cover

Light weight HDPE Base

Hubbell Quazite Pull Boxes employ a Polymer concrete made from selectgrade aggregates in combination with a polymer resin system. When combined through a process of mixing, molding, and curing, an extremely powerful cross-linked bond is formed. Precast polymer concrete is reinforced with fiberglass to give it additional strength and rigidity. **Pencell Pull Boxes** use structural foam molded High Density Polyethelyne (HDPE), a light weight, high strength plastic molding process that provides outstanding structural integrity and durability. HDPE enclosures are mated with covers made from a variety of materials: HDPE, polymer concrete or steel. This combination creates a highly versatile choice for underground utility enclosures where low weight and high strength are necessary.



GlasMasters manufactures a wide variety of underground enclosures serving various different utilities, including traffic signals and electrical junction boxes as well as large enclosures that are typically used for fiber optics and electrical pull boxes.

GlasMasters is the newest addition to our pullbox offerings - with Tier 15 and Tier 22 Polymer Concrete enclosures that provide **the unique ability to interchange logos.**

Tier-15/Tier-22 Enclosures

- Polymer concrete enclosures
- Fiber-reinforced polymer (FRP)
 enclosures
- Custom logos
- Cavity lids & interchangeable logos

Pedestrian-rated HDPE Enclosures

- Created by certified engineers
- Thoroughly tested to meet ANSI specifications
- Exceptional quality Great service
- Short lead times

Now, if you have a **special or custom logo** that needs to be made, you do not have to wait to deploy the enclosure, the logo plate can be installed in the future without effecting the load rating. This flexibility allows Netceed to have more of the right product available at the right time.

ROADWAY SAFETY



NEW TO THIS ISSUE!

U-TECK is a leading manufacturer of Fiber Splicing Tools, Fiber Deployment Products, and Safety Solutions within the Utility Industry providing customers with exceptional value through personalized solutions, service, and innovative products.

U-TECK's new **Street Saver** and **Street Saver Slim** Micro-Trench Protectors gives fiber optic contractors temporary added protection on their saw cuts, keeping the trench open and preventing edge breakage prior to backfilling. Great for high pedestrian areas and not an issue for bicyclists or strollers.

Description - Street Saver Micro-Trench Protector	Part Number
12" x 96"	29096
12" x 48"	29048
SLIM - 6" x 48"	29048-S
SLIM - 6" x 96"	29096-S



Temporary Manhole and Handhole Covers provide an additional level of fall-in protection while working at confined spaces. Made from high visibility polyethylene, these covers protect workers and pedestrians from accidental injury. Wide range of standard sizes, custom sizes and logos are also available. Handhole and Manhole covers available in a variety of sizes.



The **Ladder Wedge** is used when a ladder must be put against a building, cable, or pole, and one leg does not touch the ground firmly, thus creating an unsafe climbing condition. The Ladder Wedge is placed under the unlevel foot to make the ladder steady. The U-TECK Ladder Wedge is also needed on soft ground to prevent earth movement, which can cause the ladder foot to move while the user is climbing.



Dielectrically-safe Fiberglass Umbrellas provide a variety of options for protection from the elements, rain or shine: high-visibility, heavy duty yellow umbrella with top air vents, fiberglass extension pole and skeleton, and comes complete with adjustable tripod. Offered with straight pole or with an exclusive sturdy-tilt locking hinge.

FIBER TOOLS & ACCESSORIES



Portable, lightweight, and multi-height adjustable **Fiber Optic Workstation** that's perfect when splicing at the distribution cabinet, in a tent, inside premise work, aerially, central office, and data centers. Splicing machines attach directly to the worksurface. Includes Cable Management Bracket.



Fiber-Grip Splicing Clamp for securing fiber optic cables into place to ensure a safer and more efficient working environment for you. Quickly attaches to either end of the Workstation.



The **Fiber Drop Caddy** is designed to hold and manage Fiber Drop Hand Coils. This caddy is adjustable to accommodate various inside diameters of coils from various manufacturers.



Attach the aerial support cables into the 4 accessory slots of the **Aerial Strand Workstation** and clamp directly to the strand. Level with tie wraps. Perfect for working out of buckets, aerial lifts, or ladders.



The **Fiber Coil Turntable** is for use in the field when fiber coil deployment is difficult, and there is a MFT/MST attached to the coil. No more worry about spring back or backlash.



Self-Leveling Stand-Off Brackets attach to the 4 accessory slots of the Workstation allowing you to hang the work surface from a wall mounted ONT.

HFC & FIBER OPTICS

CONNECTIVITY SOLUTIONS FOR TRAFFIC MANAGEMENT SYSTEMS



Instant Connectivity Solutions For Intersections and Highways

Actelis' solutions instantly enable and extend high performance connectivity and remote power for ITS applications while transporting critical data to your traffic operations center.

Deployable in just a few hours, Actelis' cyber and weather hardened solution utilizes your existing fiber or twisted pair copper, yielding tremendous savings on engineering costs with no cellular fees.

Actelis networking solutions transform thousands of miles of existing city & highway infrastructures into an intelligent traffic system that:

- Connects high performance devices over fiber, copper, or coax
- Transports an unparalleled level of information from large numbers of IoT surveillance, video and traffic elements
- Enables fast, intelligent decision-making & longterm planning
- Modernizes the network at minimal implementation delay and cost

Featured Products:



MetaLIGHT 684D - 8 Ports Hybrid Fiber-Copper Switch Optional PoE++ Optional MACsec Encryption

- 10/100/1000Base-T: 6 ports (RJ-45)
- 100/1000Base-FX: 2 ports (SFP)
- Number of copper pairs: 4
- Power over Ethernet: up to 2 ports
- 256 MACsec encryption (optional)
- Temperature Hardened
- Managed



MetaLIGHT 680D - 10 Ports Optional PoE++ Optional MACsec Encryption

- 10/100/1000Base-T: 8 ports (RJ-45)
- 100/1000Base-FX: 2 ports (SFP)
- Power over Ethernet (optional): up to 2 ports
- 256 MACsec encryption (optional)
- Temperature Hardened
- Managed



MetaLIGHT 5114Dx - 14 Ports Optional PoE

- 10/100/1000Base-T: 10 ports
- 100/1000Base-FX: 4 ports
- Power over Ethernet (optional): up to 8 ports
- Temperature Hardened
- Managed

Connectivity for:

- Traffic controllers
- Cameras
- Signals
- Sensors
- Digital signs
- Emergency call boxes

HFC & FIBER OPTICS

CONNECTIVITY SOLUTIONS FOR TRAFFIC MANAGEMENT SYSTEMS



300+ Cities Selected Actelis For Their ITS Networks

Innovative solutions accelerate the development of ITS, worldwide

Featured High Density Hardened, Managed L2/L3 Switches:



GigaLine 5020 - 12 Ports Optional 10 Gig interfaces PoE++ Capabilities

- 100/1000BT: 8 ports
- 4 additional 1G or 10G ports
- PoE: Up to 6 ports
- Temperature Hardened
- Managed



GigaLine 5030 - 12 Ports 10 Gig Interfaces PoE++ Capabilities Layer 3 Capabilities

- 100/1000BT: 8 ports
- 4 additional 1G or 10G ports
- Power over Ethernet: up to 8 ports
- Temperate Hardened
- Managed



GigaLine 5060 - 20 Ports 10 Gig Interfaces PoE Capabilities Layer 3 Capabilities

- 100/1000BT: 16 ports
- 4 additional 1G or 10G ports
- Power over Ethernet: up to 16 ports
- Temperature HardenedManaged



GigaLine 5070 - Up to 20 Ports 10 Gig Interfaces Layer 3 Capabilities

- 100/1000BT: 8 ports
- 100/1000Base-FX SFP: up to 8
 ports
- 4 additional 1G or 10G ports
- Temperature Hardened
- Managed

Ethernet Aggregator - ML698E



GigaLine 5080 - 16 Ports 10 Gig Interfaces Layer 3 Capabilities

- 100/1000BT: 4 ports
- 12 additional 1G or 10G ports
- Temperature Hardened
- Managed



- Compact hybrid-fiber aggregator
- 4x10/100/1000BaseT
- 2x100/1000Base-FX
- 8 copper pairs

Repeater - XR-239

Expand the delivery of highbandwidth, high-quality connectivity along long stretches of highways



FIBER OPTIC CABLE

Future-proof Fiber Optic Cable Engineered for Today's Super High-speed and Highperformance 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

Versatile Installation & Use

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

Reliable Lifetime Performance

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



All-Dielectric Self-Supporting (ADSS) Loose Tube Fiber Optic Cable is designed for outside plant aerial applications and is the best choice for aerial cable spans. This 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.



Fiber Optic Armored Cable has a build-in metal armor inside the outer jacket, armored cable provides extra protection for fiber optic cable, without sacrificing flexibility or functionality within fiber networks. Armored fiber cable is more robust and reliable when encountered with rodent, moisture and other issues that may cause damage. The superior features make armored fiber cable a perfect fit for applications that require high flexibility and durability when used in harsh environments or limited space.



Fiber Optic Drop Cable uses special low-bend-sensitivity G.657Al fiber, providing greater bandwidth and excellent communication transmission properties. Two parallel strength members (non-metallic FRP), ensures the optical fibers are protected. The low smoke zero halogen (LSZH) flame-retardant jacket allows for safety and environmental protection.

NETCEED IS PROUD TO STOCK FIBER OPTIC CABLE FROM PREMIUM MANUFACTURERS



FIBER OPTIC PASSIVES

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 multimode cables and because there is less dispersion of the light signal in the fiber, they can transmit the signal a greater distance.



Multi-mode



Unjacketed

Fiber Optic Pigtails are manufactured using singlemode or multimode fiber and terminated with a range of single 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.

- 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

Applications:

- Termination of optical networks via fusion or mechanical splicing
- Testing of optical devices
- Cable acceptance testing



Fixed-value Attenuators reduce the signal level without appreciably distorting the waveform. Available in 1dB increments. All connector types available.

FIBER OPTIC PASSIVES



Variable Attenuators are designed to give the accurate attenuation required by the connected device and are available in a wide range from 0dB to 60dB of attenuation levels by turning the thumb screw.

Features:

- High precision attenuation value
- Wide attenuation range 0 to 60dB
- Low insertion loss
- · High environmental stability and reliability
- Easy installation
- RoHS compliant

	SC/APC to SC/APC LC/UPC to LC/UPC FC/APC to SC/APC	Fiber Optic Mating Sleeves , also known as Adapters or Couplers, are used to provide a cable to cable or cable to equipment fiber optic connection. We supply a wide range of mating sleeves and hybrid adapters, including special male to female hybrid fiber optic mating sleeves.
	LC Female to SC Male	Features:
	FC/UPC to FC/UPC	 Use in Singlemode applications Free-hanging or panel-mount design Dust caps protect against debris and contamination RoHS Compliant
E20	000/APC to E2000/APC	



Fiber Optic Line of PLC Splitters include Tube, Box, LGX Cassette and Rack Mount configurations. They offer superior performance and field-proven reliability in harsh environments.

Our Planar Lightwave Circuit (PLC) splitters are fabricated using silica optical waveguide technology. Features include small size, high reliability and a wide operating wavelength. The PLC splitter is widely used in all fiber optic networks to perform optical signal power splitting. All products are GR-1221-CORE compliant.

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

FIBER OPTIC PASSIVES



Field-installable Fiber Optic Connectors feature a pre-polished ferrule (UPC/APC), that couples to the fiber being terminated by precision mechanical alignment, insuring low loss with a proprietary gel.

Offering convenience and stability, the assembly of the connector requires only normal fiber preparation tools and minimal space, making them easy to prepare in the field in minutes. Just strip the buffer, cleave and clean the fiber, and then insert the fixed-length fiber through the ferrule of the connector.

Features:

- Quick and easy fiber termination in less than two minutes
- No epoxy, fiber polishing, special tools or fusion splicer required
- Precision mechanical alignment insures low insertion loss
- High optical performance
- Uses proven, molded v-groove technologies

Splice-on Fiber Optic Connectors are fusion-spliced, fieldinstallable connectors uniquely designed for ease of use and minimal loss. The factory pre-polished zirconia ferrule eliminates the need for polishing, adhesives, and crimping in the field, decreasing the potential for operator error.



Features:

- Quickest pre-cleaved, factory terminated pigtail to prepare, splice, and install
- Splice sleeve protects your splice
- Custom strain relief retention cap holds fiber firmly in proper alignment
- Precision machined connector holders
- Available in APC and UPC versions
- Meets or exceeds industry standards for return loss
- Ferrules are made of zirconia
- Heat shrink sleeve and connector housing included



SC/APC



Cleaver blade with 24 cut positions, or channels automatic fiber shard collector and a magnetic universal holder (clamp). It has been designed to cover a wide range of different cables, including $250\mu m \& 900\mu m$ fiber cable, flat cable, ribbon fiber, and jumper cable.

INNO V12 - Single Fiber & Ribbon Cleaver has an integrated

- Fully automatic and self-activating
- Digital Counter Cleave counts are indicated in real-time in a digital format
- Auto Blade Rotation Blade rotates after every 2,500 cleaves in 24 channels for 60,000 total cleaves per blade
- Alloy steel blade
- Maintenance free

FIBER OPTIC FUSION SPLICERS





Quick-change rechargeable lithium battery **Netceed's FSPLICE-300 Core Alignment Kit** is a tough and rugged core alignment fusion splicer that is drop/impact, dirt/ dust, and water resistant. Netceed is proud to provide a 3-Year USA warranty, and all USA service and support, at a fraction of the cost of comparable fusion splicers.

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.

Features:

- A fraction of the cost of comparable splicers
- FAST 7 second splicing
- ULTRA-FAST 9 second heat shrinking
- 3-year domestic, 1-year international warranty USA service and support
- Drop/impact, dirt/dust and water resistant
- 6-motor precision mechanism
- 5-direction anti-shock
- State-of-the-art fiber profile alignment system (PAS)
- Quick-change rechargeable lithium battery
- German design, USA & Japanese technology
- Titanium alloy frame



INNO VIEW 8X - Premium Core Alignment is 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.

Features:

- All of the advantage of View Pro Manage built-in IOT module that connects to the INNO's View Pro Cloud Management System for real-time operation and management online
- Ultra-large battery & pressure heater



INNO VIEW 5X - Core Alignment with a 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.

- All of the advantage of View Pro Manager a built-in IOT module that connects to the INNO's View Pro Cloud Management System for real-time operation and management online
- Best for working in low-light environments

FIBER OPTIC FUSION SPLICERS







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.



Sumitomo Q102-CA+ - Core Alignment Fusion Splicer 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 #1 source of frustration for operators.

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

Sumitomo Q102-M12+ - Ribbon Fusion Splicer Is 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.

Features:

- NanoTune & SumiCloud technology
- Versatile Works well with all kinds of ribbon fibers from multiple brands
- Enhanced autoclamping for better alignment
- Versatile replaceable V-groove handles

AFL Fujikura 90S+ - Core Alignment solves common problems seen in the field - from splicing poor quality legacy fiber to automated equipment maintenance and upkeep. Can be use in multiple field splicing applications including bend-insensitive fibers in drop cables, loose buffer fiber, splice-on connectors. Bluetooth enabled.

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

AFL Fujikura 90RS - Ribbon Splicer - Fiber preparation, stripping, cleaving, and setting in the splicer usually needs repeating separately for both left and right-side fibers. The 45S enables simultaneous fiber preparation thanks to the new SS05 double fiber stripper and the new AD-16A fiber adapter. Bluetooth enabled.

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

TOOLS & TOOL ACCESSORIES

Having the right tools is paramount for technicians working in traffic industry. Tools are not merely conveniences; they are essential components that directly impact efficiency, accuracy, and safety throughout the project lifecycle.

Netceed has the Tools You Need for:

- Hand & Power Tools
- Aerosols & Identification
- Personal Safety
- Site Protection
- Aerial Installation
- Cable Pulling & Jetting
- Cable Fishing & Rodding
- Field Installation



GMP - 86070 - J2 Cable Lasher

Used to lash overhead cable, duct, or numerous cables to a supporting strand (messenger), or to an existing lashed cable with a stainless steel lashing wire. The lasher's body is cylindrical to help it slip more easily through branches and obstructions.

Features:

- Built-in mechanical brake to prevent unintended reversal, and an automatic drum lock for easy span transfers
- All-range tensioning device for optimum strand traction with high strength front and rear gates for tighter lashing

Klein 1684-5 - 'Chicago' Grip

Temporary maintains grip tension until the wire or cable can be permanently terminated.

Features:

- Designed for use on aluminum, copper, weatherproof coated wire, PVC covered conductors, messenger, and guy strand
- Locking loop handles allow jaws to be held in an open position for easy placement on wire or cable

Klein 1604-20 - 'Haven's' Cable Grip

Designed for use with messenger and guy strand cable with the diameter range of 0.125 to 0.500".

Features:

- Designed for use when light, compact grip is desired and where conductor damage is not a factor
- Gripping pressure of the knurled jaw is applied to 1/4" of the cable area
- Available in various sizes and capacities

GMP - 176-A78 - CR Collapsible Power Reel



Used for rapidly stringing or taking up wire or small diameter cable. Ideal for placing or removing aerial cable, taking down wire, or pulling winch line into conduits. Can be used for pulling in poly rope or tape, where the reel will only be used as a pulling capstan and not as a storage device.

- Consists of a spindle with a fixed spider and sliding spider to which are attached six rim segments. Made of heat treated aluminum with a durable yellow finish
- A half turn of the locking member collapses all six movable segments, allowing the quick mounting or removal of coils
- Capacity of 1,600' of 1⁄4" wire rope with a maximum allowable pull of 3500lbs
- Can store a 200lbs coil of wire





TOOLS & TOOL ACCESSORIES





Runpotec - 10136 - XB500 Cable Roller System Runpotec XB500-T Cable Roller System with Telescopic Extension

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

Features:

- Holds up to 1,760lbs 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, inserts, wear parts and consumables (seals, lubricant, etc.), set of tools, speed and distance indicator, air hose and stop valve to connect to compressor, bottle of Jetting Lube

Armada PRO871C - Underground Cable Locator with Inductive Clamp

Underground cable locator makes locating wires and cables simple. Incorporates 5 different tracking modes (2 direct connect, 2 inductive, 1 passive), tracks many types of cabling including CATV, electrical, telephone, dog fencing, and landscape lighting, using either null or peak reception modes.



How it works: The cable locator transmits an easy-to-follow signal in 5 different selectable modes. Any of these modes allows users to locate the path of underground cables. Connecting the transmitter to the wire to be located enables the operator to follow the beeping signal with the receiver using the visual meter, the external speaker, or with the included headset.

Features:

- Dual direct-connect frequency transmitter (2Khz and 33Khz)
- Two additional inductive modes: built-in inductive antenna or inductive clamp
- Passive 50/60Hz tracing mode
- Audible (speaker or headset, both with volume control), or visual reception



French Creek 671P - Red Body Harness

Light-weight full body harness with super-quick bayonet chest and lag buckles, and a one piece comfort back & shoulder pad.

Features:

- 3-point adjustable chest and leg straps
- Sliding back D-ring keeps fallen worker vertically suspended
- Light-weight, comes in M, L, XL sizes
- High strength synthetic webbing

Jameson FG-6/3W - Pole Lay-up Kit w/ Wire Raiser

Use to lift wire or cable during aerial installation, also pulls or lifts obstacles out of the way. Poles made of hollow-core fiberglass for light weight, superior control, and exceptional bending strength.

Kit includes:

- 3 x 6' Hollow Core Extension Poles
- 1 x 3' Hollow Core Extension Pole
- 1 x Wire and Limb Raiser Tool Head

CONSUMABLES

Netceed supplies a wide array of consumable products to support technicians with ITS, network installations, troubleshooting, repair, and maintenance. Our consumable product selection is continuously updated to keep pace with recent technologies in the traffic industry.

Types of Consumables:

- Cleaning Materials
 Fluids & Aerosols
- Fiber Optic
- Fixation
- ID Labels & Markers
- Conduit & Civil Construction



Netceed - PVC Electrical Tape

Highly conformable and unaffected by moisture and most chemicals. Soft backing with excellent adhesion and holding ability. Comes in standard 7mil and all-weather 8.5mil.

- Features:
- · Flame retardant Heat-resistant grade plasticized polyvinyl chloride film
- · Aggressive rubber-resin adhesive
- · Unaffected by moisture and most chemicals
- Available in .75", 1", 1.5" widths and various lengths



Netceed - Cable Ties

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

Features:

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



Polywater J Gel Pulling Lubricant

High-performing, slow-drying, and the clean nature of this water-based gel electrical lubricant provides maximum tension reduction in all types of cable pulling. A proven choice for long and multiple-bend cable pulls.

Features:

- Remains on cable jacket throughout installation
- Unaffected by freeze/thaw cycles
- · Performs well when pulling in hot environments
- Can be pumped with the drill-powered lubricant pump or hand applied



Polywater Prelube 2000 - Cable Blowing Lubricant

Developed for conduit pre-lubrication during cable blowing. It reduces frictional drag and increases the distance cable can be installed in a continuous length through its efficient coating thickness.

- · Low friction Increases blowing distance
- · Suitable for pre-lubrication of a variety of cable jackets and conduits
- Can be used in sub-freezing temperatures

CONSUMABLES



OmniMarker II TEMPO - EMS Marker

EMS Markers provides an improved method to 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.

Features:

- Enclosure HDPE fully sealed
- $\cdot~$ 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

Kwikie Blank Duct Plugs

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.

There are three styles of Kwikie Blank Duct Plugs available:

- Loop Nut An additional tie point making the plug installable from both sides of the conduit
- Wing Nut Smaller in height than the loop nut, allowing installation in tighter spaces
- Inside Fit Available in either loop nut or wing nut; can be installed entirely inside the conduit and out of sight from the outside

Features:

- When the thermoplastic elastomer gasket is expanded, it creates a water, air, and rodentresistant seal – protecting the conduit from damaging environmental conditions
- Constructed of non-metallic, corrosion-resistant materials for a long-lasting and cost-effective plug
- Requires no additional tools for quick and easy installation
- $\cdot~$ Install in PVC, HDPE, EMT, and corrugated conduit for versatility
- Two rope-tie points built into the plug for installation with mule tape or pull line for a secure seal



Multiplex Duct Sealing Devices

Inflatable duct sealing systems wrap around cables in the ducts of manholes or exchange vaults. Effectively seals telephone, data, and fiber cable ducts, stopping or preventing water from leaking into the manhole or vault.

Features:

- Air-tight up to 7 psi
- Can be quickly and easily installed, even in flowing water
- · Allows for cable movement while retaining its sealing qualities
- Full range for all duct diameters



Pole Auger Drill Bit - NTFTPA000026 11/16" x 18"

Engineered to deliver cleaner, faster holes in wooden utility poles. Single spur design allows bolts to slide through without resistance.

- Reinforced anti-friction PTFE coating for overall smoother drilling
- · Optimized wide flute geometry for faster chip ejection
- Aggressive feed screw and cutting edge for faster drilling speeds
- Various sizes available



LINE CARD

We are proud to represent Netceed branded products, and the following manufacturers:



All company names, brand names, trademarks and logos are the property of their respective owners.

RESOURCES

	V	Ne	tceed	0 in		
		netceed				
	8	800-423	-2594			
Call Ne	tceed fo	r IMSA Cal	ble, Composite Camera			
Cabl	e, Fiber (Optic Cable	, Pole Line Hardware, nt - and Much More!			
w	/HY Netc	eed FOR TF	AFFIC PRODUCTS?			
• Best P	rices froi	n the Top I	lames in the Industry			
• Expert	t Staff wi	th More th	an 50 Years Experience			
• Cable	Cut to Cu	istom Leng	iths - Free			
L	Day Ship		,000 Products in Stock			
	, 1			'		
PEINS	ULATED		BLE (NOT TWISTED PAIR)			
Jacket	Spec#	Voltage Rating	Design Features			
	19-1		Aerial (Lashed) & Duct	ω.		
PVC	19-3	600	Integrated 1/4" Messenger			
Polyvinyl Chloride		000	(Figure 8), copper shielded			
	19-5 20-1		PE inner jacket, direct burial			
PE			Aerial (Lashed) & Duct Integrated ¼" Messenger			
Poly- ethylene	20-3	600	(Figure 8), copper shielded			
	20-5		PE inner jacket, direct burial	4		
			SULATED SIGNAL /			
COMN	NUNICAT		WITH COPPER SHIELD			
Jacket	Spec#	Voltage Rating	Design Feature			
	19-2	600	Acriel (Locked) & Duct			
PVC	39-2	300	Aerial (Lashed) & Duct	ω		
Polyvinyl	19-4 39-4	600 300	Int. ¼" Messenger (Figure 8)			
Chloride	19-6	600	PE inner jacket, direct burial			
	39-6	300				
55	20-2 40-2	600 300	Aerial (Lashed) & Duct			
PE Poly-	20-4	600	Int. ¼″ Messenger (Figure 8)			
ethylene	40-4 20-6	300 600		6.		
	40-6	300	PE inner jacket, direct burial			
FILLE	D, TWIST	TED PAIR, P	'E INSULATED SIGNAL/			
			LE W/COPPER SHIELD			
Jacket	Spec#	Voltage	Design Feature			
		Rating		1		
PVC Polyvinyl	59-2 59-4	300	Aerial (Lashed) & Duct Int. ¼" Messenger (Figure 8)			
Chloride	59-6		PE inner jacket, direct burial			
PE	60-2	200	Aerial (Lashed) & Duct			
Poly- ethylene	60-4 60-6	300	Int. ¼" Messenger (Figure 8) PE inner jacket, direct burial			
	200		· _ ·····er jacket, andet buridi			

Your Trusted Traffic Control and Telecom Experts



800-423-2594

		TRAFFIC	DETECT	OR	CABL	E &	WIR	E		
Insulation		Туре	Spec#		Design Feature					
PE 600V		p Detector d-in Cable	50-2	٦	Twisted Pair - PE Outer Jacket				r Jacket	
			51-1	(Clear Nylon over PVC					
PVC	П	Loop etector	51-3	(Cross-Linked PE					
600V		Wire	51-5	_	Same as 51-			but loosely cheased in		
			51-7		Same as		51-5			
		LINE WIRE								
Insulatior	۱	Spec#	Cond	duc	tor		۵	Design F	eature	
Neoprene	2	26-2								
PVC		26-4	Single		gle			RED I	PVC	
	Ļ	26-3						Jack		
High Densi PE	ty	29-1	2 Conductor							
PE		29-3	Paralle	el 'C	' wire					
		LINE WIF	RES, COP	PE	R CLA	D S	TEE	L		
Insulatior	n	Spec#	Cond	uct	or	Co	ondu	ctivity	Design Feature	
Neoprene	2	28-2								
PVC		28-4	Sin	Single		3	30 or 40%			
		28-3							RED PVC Jacket	
High Densi	ty	29-2	2 Conductor			40%				
PE		29-4	Parallel 'C' wire			30	%			
		BUIL	DING / S	ER	VICE V	NIR	E			
XLP USE	-2	RHH/F	RHW-2 THHN/TH		ΉW	WN-2 XHHW				
		HA	NDY CO	NVI	ERSIO	NS				
1 Foot = 0.3	3048	Meters		1	Meter	= 3	.281	Feet		
1 Km = 3,280.8 Feet, .062 Miles		Miles	1 Mile = 1,609.3 Meters, 1.6 Kms							
Centigrade	= (°I	= - 32) x 5/	9	Fa	ahrenh	neit	= (°C	C x 9/5)	+ 32	
LC	OOP	SEALANT	COVERAC	GE ((1 gallo	on r	nixe	d seale	r)	
3/8"Width	x 1″[Depth = 5	1 Linear I	ee	t					
3/8"Width	x 1.5	"Depth =	35 Linea	r Fe	eet					
Netceed is - We will co Specificatio	nstr	uct ANY t	ype of C	om	posite					
	<u>d</u> h	AS						stainin e IMSA	-	
		n PUBLIC SA	AFETY	C	Call Us	s Fir	st! 8	00-423	8-2594	

The **Netceed Pocket Reference Card** is a handy resource to have with you all the time. They are made from durable plastic and fit in your pocket. Give us a call at 800-423-2594 and **ask for one -** <u>they're free!</u>



YOUR ONE-STOP SHOP

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



\$1.5 Billion+ in sales revenue globally



2,000+ experienced and dedicated team members dedicated to customer satisfaction & reliability



19,000+ customers worldwide



600,000+ network product deliveries per year, and counting



90,000+ SKUs of network materials



80+ locations globally comprised of corporate offices, logistics & distribution centers, production centers, and on-site sales



Nearly **1,500** global sourcing and supply partners



Distributing 8 million+ miles of fiber annually



19 countries of Netceed's best-in-class operations



Refurbished over **6.5 million** CPE units last year, helping our customers go green and reduce capex



1 million+ sq ft of warehousing and storage capacity domestically



Supplying **70+** carriers in Europe, Middle East, and US

The information provided in this catalog is intended for informational purposes only and is subject to change without notice. Netceed may also make improvements and/or changes in the products described in this catalog at any time without notice.