

DENALI™

Peak Performance for Optical Fiber Networks

Ordering Guide

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Peak Performance for Optical Fiber Networks

The DENALI Optical Fiber Platform is specifically engineered for high-speed, high-density fiber network deployments. DENALI delivers leading-edge data center performance today while positioning the evolving fiber networks of tomorrow to scale rapidly with the increasing complexity of AI and hyperscale cloud environments.

Enhanced fiber network efficiency

Built for networks demanding density, speed, and scalable growth, DENALI supports rising fiber counts in growing cloud environments and high-power, GPU-intensive AI clusters.

Built to keep pace with AI innovation

DENALI enables quicker AI cluster expansions, reducing time-to-market and enhancing time-to-revenue with a stronger ROI on your infrastructure build.

Global consistency with local expertise

Deploy one proven platform worldwide. DENALI ensures consistent performance wherever you build, backed by local delivery capabilities and regional compliance expertise.

Simplify operations from order to install

With fewer part numbers, faster installs, and smarter integration, DENALI minimizes build complexity, keeping your network on schedule and under control.



Ordering Process

3 Simple Steps to Plan Your High-Performance Network

Housing

Choose from 1RU, 2RU, or 4RU DENALI housings.



Cassettes

Select from our range of DENALI MPO Fanout Cassettes, Patch Cassettes, and Splice Cassettes.



Assemblies

Pre-terminated trunk cables and fiber Patch Cords available.



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Housing

DENALI Fiber Housings

DENALI Fiber Housings support high-speed, high-density fiber network deployments today while enabling tomorrow's data centers to scale seamlessly with the demands of AI-driven infrastructure and accelerating cloud growth.

The modular, universal tray system houses Fanout, Patch, and Splice DENALI Cassettes. Designed for GPU-intensive environments, DENALI Fiber Housings support up to 576 fibers (288 LC Duplex Ports) in 4RU, maximizing capacity, maintaining cable management, and enabling easier network scaling as demand grows.

Globally available, DENALI Fiber Housings enhance operational efficiency and accelerate go-live times wherever you build.



Features

High Density Connectivity
- Modular, universal, tray-based system for all cassette sizes
- Up to 288 LC Duplex Ports (576 fibers) in 4RU

Simplified Cable Management for Growing Networks
- Integrated rear trunk cable management
- Removable front patch cord management clips

Versatile Installation and Access
- 19" rack mountable
- Robust magnetic front door
- Same tray for all cassette sizes
- Front or rear cassette loading with sliding trays that lock in extended position for easy access

Benefits

Future-Ready Bandwidth
- Built for 10G to 800G+ networks with minimal disruption

Modular Scalability
- Modular design supports seamless growth and densification

AI-Optimized Reliability
- Engineered for long-term reliability in AI-scale environments

Efficient Deployment
- Rapid, single-person installation reduces time and labor cost

Universal Design
- Universal tray and cassette system simplifies ordering, installation, and maintenance

Ordering Information

Description	Part Number
AFL DENALI 1RU Housing	**DENALI-1RU-S**
AFL DENALI 2RU Housing	**DENALI-2RU-S**
AFL DENALI 4RU Housing	**DENALI-4RU-S**

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Cassette

DENALI MPO Fanout Cassettes



DENALI MPO Fanout Cassettes are a pre-terminated plug-and-play modular solution designed to support incremental growth or a full-scale deployment in data center and enterprise applications.

These cassettes are offered in a range of MPO-LC fanout configurations and are compatible with all DENALI housings. They can be installed from the front or rear onto a sliding tray system which allows access to individual connections while minimizing disruption to other fiber connections.

Globally available, DENALI MPO Fanout Cassettes streamline installation, reduce deployment time, and provide peak performance for your data center network.

Features

High-Density Connectivity
- Up to 12 LC Ports (24 fibers) per cassette
- Supports Base-8, Base-12, Base-16, and Base-24 configurations

Designed for Seamless Integration
- Front or rear cassette loading for flexible installation
- Low-Loss MT Ferrules for premium network performance
- Shuttered LC Adapters to improve laser safety and reduce dirt/contamination ingress
- Polarity F – polarity is managed internally, allowing the same cassette orientation to be used at both ends of the link

Benefits

Scalable by Design
- Enables speeds from 10G to 800G and beyond
- Modular form factor supports incremental or full-scale growth
- Future-ready for equipment upgrades and parallel optic architectures

Optimized for Plug-and-Play Simplicity
- Factory-terminated and tested for rapid, one-person installation
- Faster patching with shuttered adapters (LC only) and optimized finger access

- **Consistent Performance at Global Scale**
- Maintains low-loss, high-density performance across global deployments
- Compatible with the DENALI universal sliding tray system for ease-of-installation and efficient cable management

Ordering Information

DC	–	FC	–	1	–	MUD	–	4	–	ALC	–	SM	–	MF
DC = DENALI Cassette		**Cassette Type**		**Rear Adapter Count**		**Rear Adapter**		**Front Fiber Count**		**Front Adapter**		**Fiber Type**		**Polarity**
		FC = Fanout Cassette		1		MUD = MPO KEY UP KEY DOWN		4		ALC = LC APC		SM		MF = METHOD F
				2		MUU = MPO KEY UP KEY UP		6		ULC = LC UPC		OM3		MA = METHOD A
				3				8		PLC = LC PC		OM4		
				4				12		MUD = MPO KEY UP KEY DOWN		OM5		
				5				16		MUU = MPO KEY UP KEY UP				
				6				24		USN = SN SM UPC				
								48		PSN = SN MM				

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Cassette

DENALI Patch Cassettes

DENALI Patch Cassettes enable high-density, high-performance fiber interconnects for data center and enterprise environments. Designed for seamless integration with MPO Trunk Assemblies, Patch Cords, and Fanouts, these Cassettes simplify network scaling while maximizing rack space.

DENALI Patch Cassettes are fully compatible with all DENALI Housings. Front and rear adapter access supports efficient cross-connection, while the compact footprint enhances fiber management in high-density deployments.

Globally available in a variety of configurations, DENALI Patch Cassettes streamline installation, reduce infrastructure complexity, and deliver consistent network performance.



Features

High-Density Connectivity
- Up to 6 MPO Ports and 12 LC Ports (24 fibers) per cassette
- Base-8, Base-12, Base-16, and Base-24 configurations

Designed for Seamless Integration
- Front or rear cassette loading for flexible installation
- Shuttered LC Adapters to improve laser safety and reduce dirt/contamination ingress

Benefits

Scalable by Design
- Enables speeds from 10G to 800G and beyond
- Modular form factor supports incremental or full-scale growth
- Future-ready for equipment upgrades and parallel optic architectures

Optimized for Plug-and-Play Simplicity
- Faster patching with shuttered adapters (LC only) and optimized finger access

Consistent Performance at Global Scale
- Maintains low-loss, high-density performance across global deployments
- Compatible with the DENALI universal sliding tray system for ease-of-installation and efficient cable management

Ordering Information

DC	–	PC	–	4	–	ALC	–	SM
DC = DENALI Cassette		Cassette Type PC = Patch Cassette		Front Adapter/Port Count 4 6 8 12 16 24 48		Adapter Type ALC = LC APC ULC = LC UPC PLC = LC PC MUD = MPO KEY UP KEY DOWN MUU = MPO KEY UP KEY UP USN = SN SM UPC PSN = SN MM		Fiber Type SM OM3 OM4 OM5 ALL

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Cassette

DENALI Splice Cassettes



DENALI Splice Cassettes deliver flexible, high-density splice management for evolving data center and enterprise networks. Designed for rapid field termination, each cassette supports 250-micron single fiber or ribbon pigtails.

A snap-in splice sleeve cradle keeps both single and ribbon fibers organized, and the cassette design allows front or rear installation for efficient Moves, Adds, and Changes (MACs) without disrupting adjacent connections.

Globally available, DENALI Splice Cassettes simplify splicing, reduce installation time, and maintain consistent network performance.

Features

High-Density Splicing
- Up to 12 LC ports (24 fibers) per cassette
- Supports Base-8, Base-12, Base-16, and Base-24 configurations

Seamless Integration
- Pre-loaded and pre-routed pigtails
- Single fiber or ribbon fiber splicing
- Front or rear cassette loading for flexible installation
- Shuttered LC Adapters to improve laser safety and reduce dirt/contamination ingress

Benefits

Scalable by Design
- Enables speeds from 10G to 800G and beyond
- Modular form factor supports incremental or full-scale growth
- Future-ready for equipment upgrades and parallel optic architectures

Optimized for Plug-and-Play Simplicity
- Factory-terminated and tested for rapid, one-person installation
- Faster patching with shuttered adapters and optimized finger access

Consistent Performance at Global Scale
- Maintains low-loss, high-density performance across global deployments
- Compatible with the DENALI universal sliding tray system for ease-of-installation and efficient cable management

Fast, One-Person Installation
- Faster patching with shuttered adapter
- Splice work can take place conveniently away from the rack
- 60-75% faster field splicing with ribbon pigtails and mass-fusion splicing

Ordering Information

DC	–	SC	–	4	–	ALC	–	SM	–	S	–	MF
DC = DENALI Cassette		**Cassette Type** SC = Splice Cassette		**Front Adapter Count** 4 6 8 12 16 24 48		**Front Adapters** ALC = LC APC ULC = LC UPC PLC = LC PC MUD = MPO Key Up Key Down MUU = MPO Key Up Key Down		**Fiber Type** SM OM3 OM4 OM5		**Fiber Bundle** S = Stranded R = Coated Ribbon		**Polarity** MF = METHOD F BLANK = Standard (A)

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DENALI MPO Trunk Assemblies



DENALI MPO Trunk Assemblies provide high-performance, plug-and-play connectivity ideal for compact, high-density data center and enterprise applications.

The small-diameter MicroCore® cable offers excellent bend tolerance during and after installation, reducing space requirements in cable trays, raceways, ducts, and conduits. This space-efficient design also contributes to improved airflow in densely populated network infrastructures.

DENALI trunks are available in Base-8, Base-12, Base-16 and Base-24 configurations to align with various network architectures. All connectors feature high-quality optical and mechanical properties for reliable performance.

Features

Low-Loss MPO Connectivity

- Polarity options available for various applications
- MPO interface available with male or female connectors
- Base-8, Base-12, Base-16 and Base-24 connectors available
- MPO components feature superior optical and mechanical properties
- MTP® PRO connectors include field-reversible polarity and gender (multimode only)
- Low-loss Premium MPO connectors assures low insertion losses and power penalties in tight power budget, high-speed network environments

Benefits

Installation-Friendly Design

- Optional pulling eye for easier installation
- Pre-defined breakout lengths reduce design complexity
- Reduced diameter MicroCore cable with 2.0 mm subunits (up to 144 fibers)
- Integrated Outback Clip mates directly with the trunk cable management area in all DENALI Housings

Ordering Information

CONNECTOR END A	CONNECTOR END B	CABLE TYPE	FIBER COUNT	FIBER TYPE	CABLE LENGTH	PULLING EYE	POLARITY	OBC	BASE SELECTION	PLATFORM
ETF	ETF	PL	012	Q	0001	PA	MF	RS	12	DENALI

CONNECTOR END A / CONNECTOR END B

EEF = MPO Low Loss, SM, 8 fiber, Female
EEM = MPO Low Loss, SM, 8 fiber, Male
PFEF = MTP PRO-MM, 8 fiber, Female
PFEM = MTP PRO-MM, 8 fiber, Male
ETF = MPO Low Loss, SM, 12 fiber, Female
ETM = MPO Low Loss, SM, 12 fiber, Male
PFTF = MTP PRO-MM, 12 fiber, Female
PFTM = MTP PRO-MM, 12 fiber, Male
XXX = No Connector (Pigtail)

CABLE TYPE

Options for Trunk & Pigtail Assemblies:
PL = Plenum MicroCore® (250 µm)
P4 = 4.8 mm Plenum MicroCore (for 12F cables only)
GE = LSZH MicroCore (250 µm)

Options for Pigtail Assemblies Only:
GQS = 2.0 mm Plenum MicroCore (SWR)
GES = 2.0 mm LSZH MicroCore (SWR)

FIBER COUNT

008 = 8
012 = 12
024 = 24
048 = 48
072 = 72
096 = 96
144 = 144
288 = 288

FIBER TYPE

Q = Single-mode G.657.A1 BIF
L = Multimode OM3
C = Multimode OM4

CABLE LENGTH

XXXX = Meters
XXXXFT = Feet

PULLING EYE

N = No Pulling Eye
PA = Pulling Eye End A
PB = Pulling Eye End B
PC = Pulling Eye Both Ends

POLARITY

MF = Method F
MA = Method A

OBC

HM = Hook & Loop OBC, Mixed
HS = Hook & Loop OBC, Small
HL = Hook & Loop OBC, Large
RS = Rock & Lock*, Small
NC = Spool Only
Blank = Standard OBC

* NOTE – The "Rock and Lock" mounting clip is only available for trunk cable diameters up to 13 mm and will come standard on trunk cables with fiber counts up to 288. The "Hook and Loop" mounting clip is available by request only.

BASE SELECTION

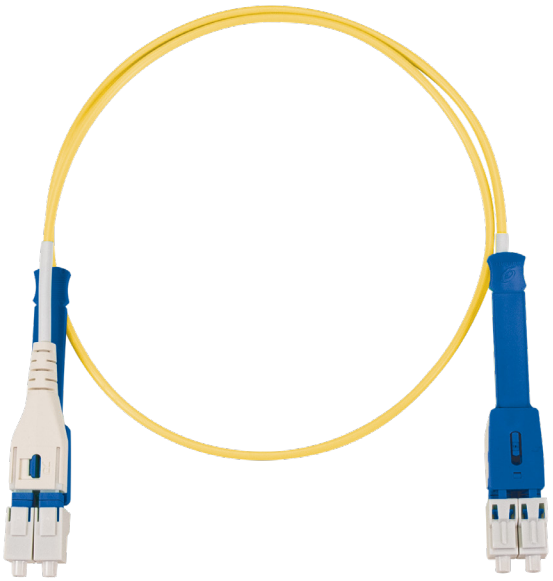
08 = BASE-8
12 = BASE-12

PLATFORM

DENALI

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DENALI Patch Cords Assemblies



DENALI LC Patch Cords – optimized for high-density environments with field-reversible flexibility.

DENALI LC Patch Cords combine AFL's Micro Dual-Link cable with a field-reversible Uniboot LC connector, delivering compact, high-performance connectivity for dense fiber environments.

The compact cable diameter reduces front-of-rack congestion and promotes better airflow, while the extended push-pull latch ensures fast, reliable connections in high-density environments. The Uniboot LC connector also allows tool-free polarity reversal in the field, offering added flexibility during installation.

Features

- Tool-free field reversibility (pre-terminated A-to-B polarity)
- Available in Single-Mode (SM), OM3, and OM4 Multi-Mode (MM)
- Bend-insensitive SM G.657.A1 fiber for greater installation flexibility
- Compact 2.0 mm round jacket available in plenum and LSZH
- Extended push-pull latch for improved accessibility in high-density panels

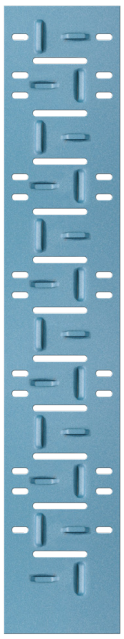
Ordering Information

CONNECTOR END A	CONNECTOR END B	CABLE TYPE	FIBER COUNT	FIBER TYPE	CABLE LENGTH (METERS)
ULS	ULS	P20D	002	Q	0000
ULS = Single-mode LC Uniboot, Push/ Pull Tab PLS = Multimode LC Uniboot, Push/ Pull Tab	ULS = Single-mode LC Uniboot, Push/ Pull Tab PLS = Multimode LC Uniboot, Push/ Pull Tab	P20D = 2.0 mm Dual Link Plenum L20D = 2.0 mm Dual-Link LSZH	002 = 2	Q = Single-mode G.657.A1 L = Multimode OM3 C = Multimode OM4	XXXX = Meters XXXXFT = Feet

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Assemblies

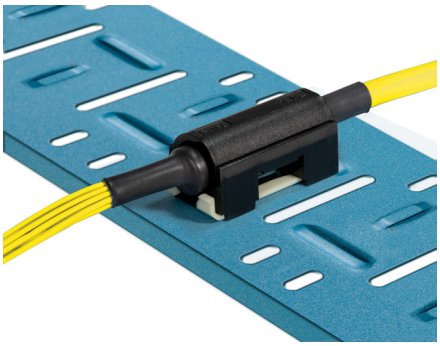
DENALI Outback Clip Management (OCM) Bracket



DENALI Outback Clip Management (OCM) Bracket provides an intermediate mounting point for high-fiber-count trunk cables before connecting to the rear of DENALI fiber housings, ensuring clean, secure, and strain-relieved cable routing.

Designed for use with AFL's Outback Clip system, available on DENALI Trunk Cable assemblies. The bracket installs on standard 19" racks – typically 3 to 5 Rack Units (RUs) above or below the housing – accommodating up to 12 trunk cables, offering structured, high-density cable management in space-constrained environments.

By securing cables to the bracket instead of directly to the housing, the OCM Bracket reduces strain, maintains bend radius, and improves overall cable alignment, helping protect network performance during installation and operation.



Two clip styles support different mounting preferences:

- **Hook and Loop**
  Attaches using Velcro® hook and loop fastening
- **Rock and Lock**
  Secures to the housing with a lever mechanism

This bracket is ideal for installers looking to improve trunk cable routing while ensuring consistent, high-density cable management in demanding network environments.

Features

- Mounts directly to 19" rack rails above or below the DENALI Housing
- Supports up to 12 Outback Clip mounted trunk cables
- Provides strain relief and bend radius control before cable entry into the housing
- Includes rack tap screws for easy and secure installation
- Rugged steel construction for durability

Ordering Information

Description	Part Number
DENALI, Outback Mounting Clip Bracket, 12 Positions	**OCM-12**

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DENALI Accessories



The DENALI Optical Fiber Platform is engineered to support a wide range of high-performance network applications including hyperscale, AI-driven and cloud environments. A comprehensive set of accessories is available to enhance installation flexibility, cable management, and field adaptability.

DENALI Cable Mounting Brackets

The DENALI Optical Fiber Platform is engineered to support a wide range of high-performance network applications including hyperscale, AI-driven and cloud environments. A comprehensive set of accessories is available to enhance installation flexibility, cable management, and field adaptability.

Description	Part Number
DENALI Single Mounting Kit, 1x23 Cable Clamp	**DENALI-CE-1-KIT**
DENALI Double Mounting Kit, 2x13.5 Cable Clamp	**DENALI-CE-2-KIT**

DENALI 23" Rack Mount Kit

DENALI Housings come standard with 19" rack-mount brackets pre-installed. A 23" rack-mount kit is available separately for compatibility with wider rack systems.

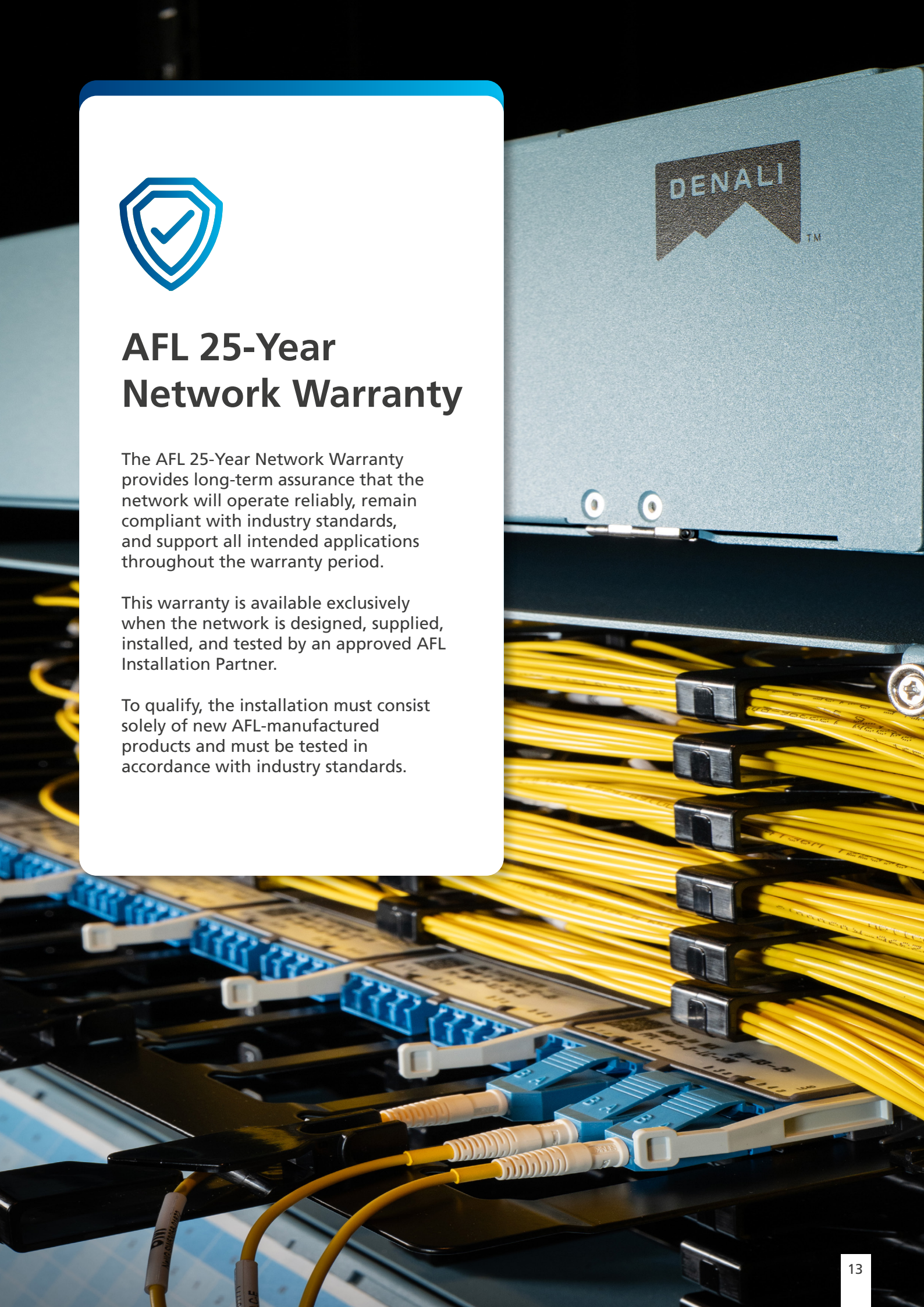
Description	Part Number
DENALI Kit – 1RU 23" Mounting Bracket	**DENALI-1RU-23MB-KIT**
DENALI Kit – 2RU 23" Mounting Bracket	**DENALI-2RU-23MB-KIT**
DENALI Kit – 4RU 23" Mounting Bracket	**DENALI-4RU-23MB-KIT**

DENALI Tray Kits

DENALI Tray Kits can be used for field replacements in existing DENALI Housings. Each kit comes with the specified number of trays, patch cord managers and labeling stickers to label each tray as needed.

Description	Part Number
DENALI Tray, Pack of 1, Pack of Labels	**DENALI-TRAY-KIT-1**
DENALI Tray, Pack of 3, Pack of Labels	**DENALI-TRAY-KIT-3**
DENALI Tray, Pack of 6, Pack of Labels	**DENALI-TRAY-KIT-6**
DENALI Tray, Pack of 12, Pack of Labels	**DENALI-TRAY-KIT-12**
DENALI Tray Labels 1-12	**DENALI-TRAY-LABELKIT**

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AFL 25-Year Network Warranty

The AFL 25-Year Network Warranty provides long-term assurance that the network will operate reliably, remain compliant with industry standards, and support all intended applications throughout the warranty period.

This warranty is available exclusively when the network is designed, supplied, installed, and tested by an approved AFL Installation Partner.

To qualify, the installation must consist solely of new AFL-manufactured products and must be tested in accordance with industry standards.

How to Order

We have dedicated multilingual sales teams around the world who will be able to assist you in quotes and ordering. Scan the QR code to fill out a contact form.

You can also find the contact details for our teams below:

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Founded in 1984, AFL is an international manufacturer providing end-to-end network solutions to the energy, service provider, enterprise, hyperscale and industrial markets. The company's products are in use in over 130 countries and include fiber optic cable, assemblies, and hardware, transmission and substation accessories, outside plant equipment, connectivity, test and inspection equipment, fusion splicers, and training. AFL also offers a wide variety of services supporting data center, enterprise, wireless and outside plant applications.

Headquartered in Spartanburg, SC, AFL has operations in the U.S., Mexico, Canada, Europe, Asia and Australia, and is a wholly owned subsidiary of Fujikura Ltd. of Japan.

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