

# InvisiLight® Optical Solutions

Supporting Multiple Dwelling Unit (MDU) and Indoor Living Unit (ILU) Applications



#### **Features**

- EZ-Bend® G.657.B3 Optical Fiber with 2.5 mm bend radius
- Complete installation kit
- Adhesive and Application Tool

#### **Benefits**

- · Corner and décor friendly
- Simple and easy installation with minimal tools
- Fast, repeatable process

### **Product Description**

OFS InvisiLight® Optical Solutions offer a revolutionary system that enables fast, easy and virtually invisible optical fiber installations for indoor living units (ILUs) and multiple dwelling units (MDUs). The InvisiLight ILU Solution consists of a single optical fiber for fiber-in-the-home (FITH) installations, whereas the InvisiLight MDU Solution consists of a 12-fiber unit for building hallways.

These InvisiLight Optical Solutions eliminate the need for large-form-factor optical fiber cables, unsightly staples, wire molding or unreliable tapes. They also make installation safer by not requiring installers to enter attics or other hard-to-access areas. The installer also uses a safe, simple and innovative process to adhere the optical fiber, resulting in a protected link that blends seamlessly into the residential or building décor.

Please refer to the InvisiLight Optical Solutions brochure that describes the solutions in greater detail.



InvisiLight ILU Solution installed in a residence



InvisiLight MDU Solution installed in a building hallway





**TAKE A CLOSER LOOK** Almost invisible to the human eye

### InvisiLight ILU Solution - Indoor Living Units

#### **Product Overview**

- Plug and Play
  - Factory terminated
  - Auto-slack storage on spool in module
- EZ-Bend® 900 µm buffered fiber compliant with G.657.B3 Fully splice compatible with outstanding macrobending performance (1 turn at 1550 nm):
  - < 0.1 dB loss at 5 mm bend radius
  - < 0.2 dB loss at 2.5 mm bend radius
- Capable of supporting a maximum of 30 outside and 30 inside corners

#### Standards and Testing

- Meets Telcordia GR-326 simplex connector standard
- Fiber and adhesive system is UL-1651 compliant
- RoHS compliant; free from heavy metals and environmentally friendly. Nonhazardous to human touch and creates negligible waste
- Fully tested for compatibility with most wall and ceiling materials (contact OFS for a complete list)
  - Easily painted with both latex and oil-based paints

#### InvisiLight Adhesive

Opaque color during application; turns clear after approximately 1 hour

Set Time: 15 minutes

Tack-Free Time: 45 minutes

Full Cure Time: 24 hours depending on temperature, humidity,

and thickness of adhesive

Long term storage is best at room temperature. Keep the adhesive tubes from freezing and below +38 °C.

Operating Temperature (Cured): -40 °C to +60 °C

Installation Temperature: ≥ +10 °C

InvisiLight ILU Solution - Indoor Living Units				
Connector	Insertion Loss Max./Std. Deviation	Return Loss Max.	Operating Temperature Range (Inside)	Installation Temperature Range
LC UPC	0.25/0.55	-55 dB	-10 to +60 °C	> +10 °C
LC APC	0.5/0.05	-65 dB	-10 to +60 °C	> +10 °C
SC UPC	0.3/0.05	-55 dB	-10 to +60 °C	> +10 °C
SC APC	0.5/0.05	-65 dB	-10 to +60 °C	> +10 °C

### InvisiLight® Optical Solutions

### InvisiLight ILU Solution - Ordering Guide



The InvisiLight ILU Solution Kit includes: a module for storing the remaining fiber on the spool, connectorized InvisiLight spool, six (6) outside corner bend limiters, six (6) inside corner bend limiters, four (4) wall plugs and caps, two (2) through-wall tools and installation instructions. The spools contain varying lengths of connectorized fiber up to 40 meters. The adhesive, adhesive application tool and pole extension tool are sold separately.

Ordering	Item	Description			
InvisiLight IL	InvisiLight ILU Solution Kits				
301083382	NVSLGHTC-D-SCASCA-MODULE KIT-05M-EA	Connectorized 5-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
301083390	NVSLGHTC-D-SCASCA-MODULE KIT-10M-EA	Connectorized 10-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
301099115	NVSLGHTC-D-SCASCA-MODULE KIT-20M-EA	Connectorized 20-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
301099123	NVSLGHTC-D-SCASCA-MODULE KIT-30M-EA	Connectorized 30-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
301099131	NVSLGHTC-D-SCASCA-MODULE KIT-40M-EA	Connectorized 40-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
InvisiLight ILU 80x80 Solution Kits					
301122099	NVSLGHTC-D-SCASCA-80x80 KIT-05M-EA	Connectorized 5-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
301122107	NVSLGHTC-D-SCASCA-80x80 KIT-10M-EA	Connectorized 10-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
301117271	NVSLGHTC-D-SCASCA-80x80 KIT-20M-EA	Connectorized 20-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
301117289	NVSLGHTC-D-SCASCA-80x80 KIT-30M-EA	Connectorized 30-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
301117297	NVSLGHTC-D-SCASCA-80x80 KIT-40M-EA	Connectorized 40-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions			
Adhesive					
301083184	NVSLGHTC-TUBE, 30ML ADHESIVE WH/GR-TIP EA	30mL adhesive tube			
301142105	NVSLGHTC-TUBE, 55ML ADHESIVE WH/GR-TIP EA	55mL adhesive tube			
Tools					
301079109	NVSLGHTC-MINI DISPENSING TOOL	Dispensing tool for adhesive application			
301079638	NVSLGHTC-TOOL BELT KIT	Tool belt kit includes case, screwdrivers, drill bits, utility knife, visual fault locator and tape measure			
301115671	NVSLGHTC-Pole Extension Tool	InvisiLight pole extension tool			



Through-Wall Tool and Package of Four (4) Wall Covers



80 x 80 Adapter Module or Living Unit Entry Point to connect the ILU to the outside optical fiber



Inside and Outside **Corner Protectors** (Package of 10 each)



Adhesive Dispensing Tool and Adhesive (in tube)





### InvisiLight MDU Solution - Building Hallways

#### **Product Overview**

- Four fiber count cords are available:
  - Four (4), eight (8) and twelve (12) color-coded optical fibers, within a 2 mm outer diameter (OD) sheath
  - Sixteen (16) color-coded optical fibers, within a 2.3 mm outer diameter (OD) sheath
- EZ-Bend® Optical Fiber, compliant with G.657.B3. Fully splice compatible with outstanding macrobending performance (1 turn at 1550 nm):
  - < 0.1 dB loss at 5 mm bend radius
  - < 0.2 dB loss at 2.5 mm bend radius
- Capable of supporting a maximum of 40 outside corners with no limit on inside corners
- Field termination required at the living unit (field-installable connector or pigtail
- Must be installed in riser-rated conduit in risers, in-between floors, through firewalls or when not adhered to a supporting surface

### Standards and Testing

- Meets Telcordia GR-326 and GR-1435 standards
- The Invisilight Multifiber cord is OFNG-FT4, OFNR-LS, and UL 1666 OFNR-LS
- RoHS compliant; free from heavy metals and environmentally friendly; nonhazardous to human touch and creates negligible waste
- Fully tested for compatibility with most wall and ceiling materials; easily painted with both latex and oil-based paints

#### InvisiLight Adhesive

- Opaque color during application; turns clear after approximately 1 hour
- Set Time: 15 minutes

Tack-Free Time: 45 minutes

Full Cure Time: 24 hours depending on temperature, humidity, and thickness of

adhesive

Long term storage is best at room temperature. Keep the adhesive tubes from freezing and below +38 °C.

Operating Temperature (Cured): -40 °C to +60 °C

Installation Temperature: ≥ +10 °C



### **Related Product**

The 12-Fiber SlimBox™ Module with internal adapters is an excellent choice for terminating or splicing the 12 fibers from the InvisiLight Multfiber Cord in a telecom or hallway closet.

InvisiLight MDU Solution - Building Hallways				
Connector	Insertion Loss Max./Std. Deviation	Return Loss Max.	Operating Temperature Range (Inside)	Installation Temperature Range
LC UPC	0.25/0.55	-55 dB	-10 to +60 °C	> +10 °C
LC APC	0.5/0.05	-65 dB	-10 to +60 °C	> +10 °C
SC UPC	0.3/0.05	-55 dB	-10 to +60 °C	> +10 °C
SC APC	0.5/0.05	-65 dB	-10 to +60 °C	> +10 °C
MTP APC	0.75/0.05	-50 dB	-10 to +60 °C	> +10 °C

## InvisiLight® Optical Solutions

InvisiLight MDU Solution - Ordering Guide



The InvisiLight MDU Solution kit includes: a spool of the InvisiLight Multifiber Cord with 12 EZ-Bend Optical Fibers, 12 Point-of-Entry (POE) modules, 20 outside corner bend limiters, 20 inside corner bend limiters, 12 wall plugs and caps, two (2) through-wall tools and installation instructions. The InvisiLight Multifiber Cord is available in lengths of 100 and 300 meters with custom lengths upon request. The adhesive (in tubes), adhesive application tool and pole extension tool are sold separately.

Ordering	Item	Description			
InvisiLight M	DU Solution Kits (16-Fiber)				
301140653	NVSLGHTHI-D-UNCUNC-CMODUL KIT-16-100M EA	Unconnectorized 16-fiber InvisiLight Multifiber Unit, 100 meters, 16 compact point-of-entry (POE) modules and components			
301140661	NVSLGHTHI-D-UNCUNC-CMODUL KIT-16-300M EA	Unconnectorized 16-fiber InvisiLight Multifiber Unit, 300 meters, 16 compact point-of-entry (POE) modules and components			
301140596	NVSLGHTHI-D-SASUNC-CMODUL KIT-16-100M EA	SC-APC connectorized (one end) 16-fiber InvisiLight Multifiber Unit, 100 meters, 16 compact point-of-entry (POE) modules and components			
301140604	NVSLGHTHI-D-SASUNC-CMODUL KIT-16-300M EA	SC-APC connectorized (one end) 16-fiber InvisiLight Multifiber Unit, 300 meters, 16 compact point-of-entry (POE) modules and components			
InvisiLight M	DU Solution Kits (12-Fiber)				
301117149	NVSLGHTHI-D-SCAUNC-Module Kit-12-100M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 100 meters, 12 point-of-entry (POE) modules and components			
301139408	NVSLGHTHI-D-SCAUNC-MODULE KIT-12-200M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 200 meters, 12 point-of-entry (Large POE) modules and components			
301117156	NVSLGHTHI-D-SCAUNC-Module Kit-12-300M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 300 meters, includes 12 point-of-entry (POE) modules and components			
301117180	NVSLGHTHI-D-MTFUNC-Module Kit-12-100M-EA	MPO (Ribbon) connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 100 meters, includes 12 point-of-entry (POE) modules and components			
301117198	NVSLGHTHI-D-MTFUNC-Module Kit-12-300M-EA	MPO (Ribbon) connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 300 meters, includes 12 point-of-entry (POE) modules and components			
301117164	NVSLGHTHI-D-LCAUNC-Module Kit-12-100M-EA	LC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 100 meters, includes 12 point-of-entry (POE) modules and components			
301117172	NVSLGHTHI-D-LCAUNC-Module Kit-12-300M-EA	LC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 300 meters, includes 12 point-of-entry (POE) modules and components			
301117123	NVSLGHTHI-D-UNCUNC-Module Kit-12-100M-EA	Unconnectorized 12-fiber InvisiLight Multifiber Unit, 100 meters, includes 12 point-of-entry (POE) modules and components			
301117131	NVSLGHTHI-D-UNCUNC-Module Kit-12-300M-EA	Unconnectorized 12-fiber InvisiLight Multifiber Unit, 300 meters, includes 12 point of entry (POE) modules and components			
301127007	NVSLGHTHI-D-SCAUNC-CMODUL KIT-12-100M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 100 meters, 12 compact point-of-entry (POE) modules and components			
301126942	NVSLGHTHI-D-SCAUNC-CMODUL KIT-12-200M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 200 meters, 12 compact point-of-entry (POE) modules and components			
301133617	NVSLGHTHI-D-SCAUNC-CMODUL KIT-12-300M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 300 meters, 12 compact point-of-entry (POE) modules and components			
InvisiLight M	InvisiLight MDU Solution Kits (8-Fiber)				
301140638	NVSLGHTHI-D-UNCUNC-CMODUL KIT-08-100M EA	Unconnectorized 8-fiber InvisiLight Multifiber Unit, 100 meters, 8 compact point-of-entry (POE) modules and components			
301140646	NVSLGHTHI-D-UNCUNC-CMODUL KIT-08-300M EA	Unconnectorized 8-fiber InvisiLight Multifiber Unit, 300 meters, 8 compact point-of-entry (POE) modules and components			
301140570	NVSLGHTHI-D-SASUNC-CMODUL KIT-08-100M EA	SC-APC connectorized (one end) 8-fiber InvisiLight Multifiber Unit, 100 meters, 8 compact point-of-entry (POE) modules and components			
301140588	NVSLGHTHI-D-SASUNC-CMODUL KIT-08-300M EA	SC-APC connectorized (one end) 8-fiber InvisiLight Multifiber Unit, 300 meters, 8 compact point-of-entry (POE) modules and components			



Ordering	Item	Description			
InvisiLight M	InvisiLight MDU Solution Kits (4-Fiber)				
301140612	NVSLGHTHI-D-UNCUNC-CMODUL KIT-04-100M EA	Unconnectorized 4-fiber InvisiLight Multifiber Unit, 100 meters, 4 compact point-of-entry (POE) modules and components			
301140620	NVSLGHTHI-D-UNCUNC-CMODUL KIT-04-300M EA	Unconnectorized 4-fiber InvisiLight Multifiber Unit, 300 meters, 4 compact point-of-entry (POE) modules and components			
301140562	NVSLGHTHI-D-SASUNC-CMODUL KIT-04-100M EA	SC-APC connectorized (one end) 4-fiber InvisiLight Multifiber Unit, 100 meters, 4 compact point-of-entry (POE) modules and components			
301140554	NVSLGHTHI-D-SASUNC-CMODUL KIT-04-300M EA	SC-APC connectorized (one end) 4-fiber InvisiLight Multifiber Unit, 300 meters, 4 compact point-of-entry (POE) modules and components			
POE Module	POE Module				
301107447	NVSLGHTH-Module E/W LCA ADAPTER	Additional point-of-entry (POE) module with LC-APC adapter			
301107454	NVSLGHTH-Module E/W SCA ADAPTER	Additional point-of-entry (POE) module with SC-APC adapter			
301107462	NVSLGHTH-Module E/W SPLICE TRAY	Additional point-of-entry (POE) module with splice tray			
301123998	NVSLGHTH-COMPACT-MODULE W/ LCA ADAPTER	Additional compact point-of-entry (POE) module with LC-APC adapter			
301124004	NVSLGHTH-COMPACT-MODULE W/ SCA ADAPTER	Additional compact point-of-entry (POE) module with SC-APC adapter			
Telecom Clo	Telecom Closet				
301117883	WSC1W-012-SBM0-BGE-MTMUNC-F	12-fiber SlimBox module with MPO adapter			
301117891	WSC1W-012-SBM0-BGE-SCAUNC-F	12-fiber SlimBox module with SC-APC adapter			
301117909	WSC4W-012-SBM0-BGE-LCUUNC-F	12-fiber SlimBox module with LC-APC adapter			
301085551	WSC1W-012-SBM0-BGE-SCAUNC-F-PT	12-fiber SlimBox module with SC-APC adapter and pigtails			
301117917	WSC4W-012-SBM0-BGE-LCUUNC-F-PT	12-fiber SlimBox module with SC-APC adapter and pigtails			
301122404	WSC1S-012-SM11-GRY-SCAUNC-F	12-fiber SlimBox module with SC-APC internal adapters			
Tools					
301120986	NVSLGHTH-MID Span Tool	12-fiber multifiber cord access tool			
301079109	NVSLGHTC-MINI Dispensing Tool	Adhesive dispensing tool			
301079638	NVSLGHTC-Tool Belt Kit	InvisiLight tool belt kit			
301115671	NVSLGHTC-Pole Extension Tool	InvisiLight pole extension tool			
301124988	TOOL, MS06-2.0MM-3.0MM BLUE	Tool to slit the jacket of 2.0 and 3.0 mm optical cords			
Adhesive					
301083184	NVSLGHTC-TUBE, 30ML ADHESIVE WH/GR-TIP EA	30mL adhesive tube			
301142105	NVSLGHTC-TUBE, 55ML ADHESIVE WH/GR-TIP EA	55mL adhesive tube			



Point-of-Entry (POE) Module at the tenant apartment



Adhesive Dispensing Tool and Adhesive (in tube)

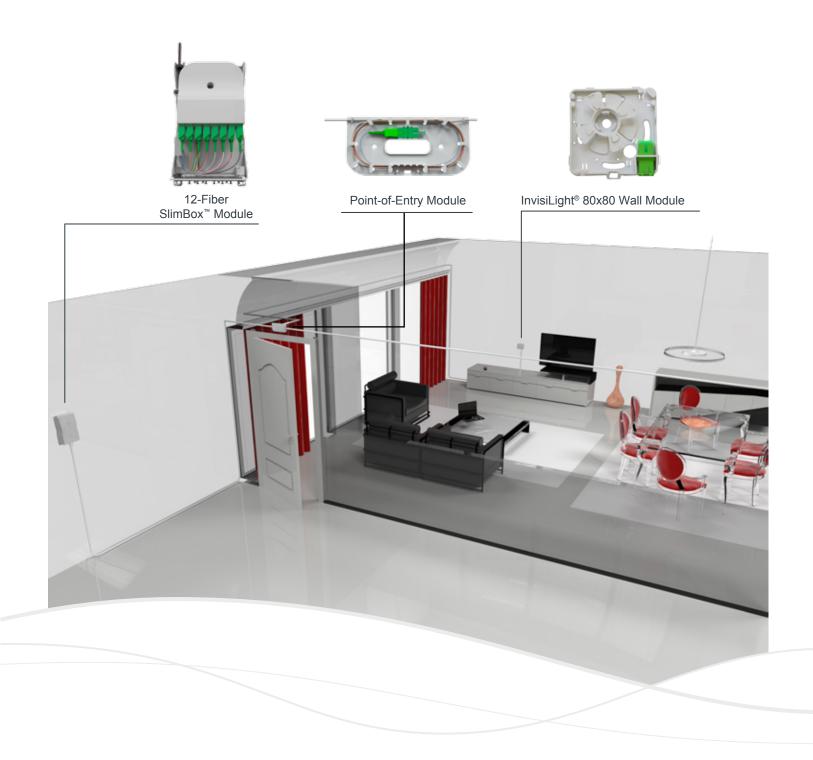


InvisiLight Multifiber Cord shipped on a spool

# InvisiLight® Optical Solutions for Home and Business

100X Faster Speeds for the Internet of All Things





Contact OFS Today! www.ofsoptics.com

### For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.





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