



A Furukawa Company

InvisiLight[®] ILU EZ-Hide[™] Module

Installation Instructions

Revision 0.0

SAFETY

Make sure to comply with your employer or contractor training and safety procedures and all government safety regulations. The adhesive used with the InvisiLight[®] Solution may cause allergic skin reaction. Wear protective gloves and safety goggles and avoid breathing vapors. Do not look into any fiber optic connector as eye damage may result.

DISCLAIMER

This installation instruction is furnished on an “as is, where is” basis. OFS disclaims any and all liability, representation or implied, regarding this instruction, its content and use to the fullest extent permitted by law.

1.0 Module Overview

The OFS InvisiLight® ILU (Indoor Living Unit) EZ-Hide Module simplifies in-home InvisiLight ILU installations. The Module features a 2-layer spool, enabling payout of the pre-connectorized micro-drop and jumper in two different directions, eliminating the need for a final connection to the ONT. The EZ-Hide Module is a flush mount panel that covers the InvisiLight spool which is behind the wall in a cut out window. The InvisiLight ILU solution enables nearly invisible, fast, plug and play fiber placement into living units to connect FTTH services to subscribers.

This instruction is an addendum to OFS installation document D12AK0148, InvisiLight Installation Instructions, and covers the installation of the EZ-Connect Module only. Please refer to document D12AK0148 for more detailed installation instructions for the ILU micro-drop.

2.0 . Tools and Components

Tools for the module installation only. See document D12AK0148 for a complete list of suggested tools to install the InvisiLight ILU micro-drop.

Tape measure
Portable drill – 3/16” bit
Small Phillips-head screwdriver

2.1 Components



EZ Hide two-layer spool assembly with factory installed SC-A connectors. Components consist of the wall plate cover, spool and spool bracket.



Side view of the EZ Connect two-layer spool assembly. The lower layer includes the 900 μm micro-drop. The upper layer includes the shorter-length jumper layer that will be plugged into the ONT.

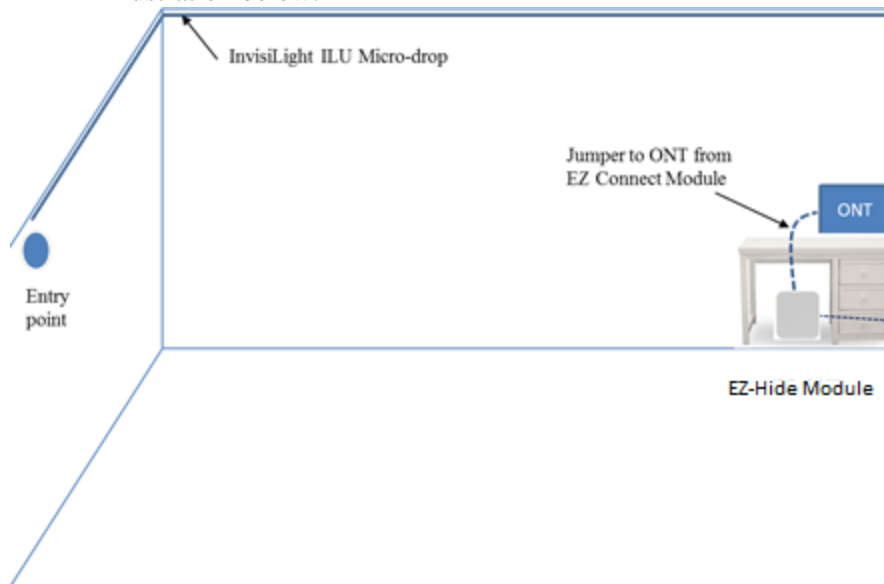
3.0 Installation Procedure

3.0 Survey Residence and Determine Placement Strategy

3.0.1 Identify location of Fiber Entry Point.

3.0.2 Identify the lengths of InvisiLight ILU micro-drop and jumper contained in the module. These lengths are identified in the product code on the package. For example, NVSLGHTD-D-SCASCA-0-BTW-DW 2MM-2.5M/40M, identifies that the module contains 2.5m of 2mm cord as the jumper length, and 40m of InvisiLight ILU micro-drop.

3.0.3 Determine approximate desired location of the ONT and wall-mount module, per the illustration below.



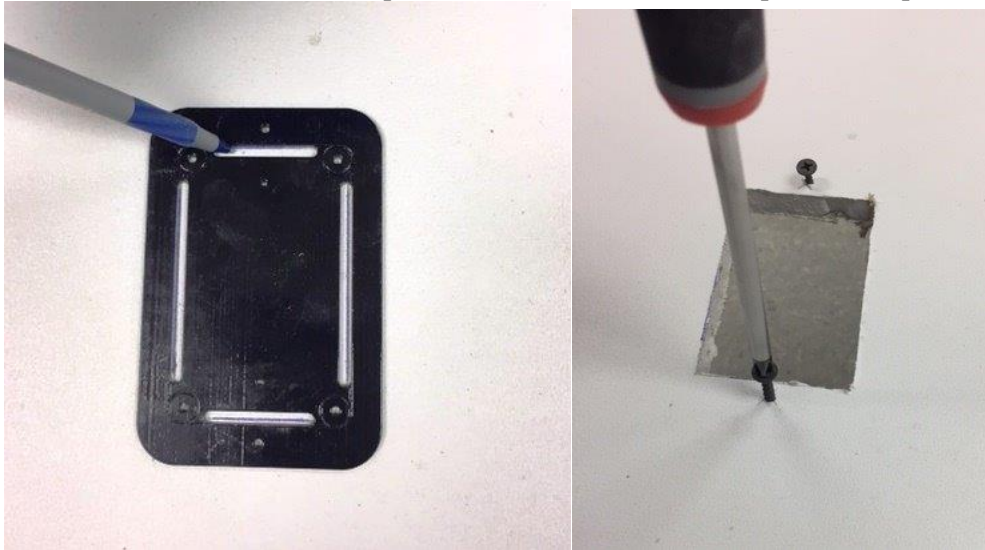
Note: The micro-drop length must be longer than the distance from Fiber Entry Point to the module. A good practice is to use the next larger size if the measured distance is within 3 meters of the micro-drop length. The jumper length must be longer than the distance from the module to the ONT.

3.1 EZ-Hide Wall Plate Mounting

3.1.1 Identify a space on a wall within the appropriate distance of the desired ONT location. Mark the location for cutting the wall using the wall cut out template noting the placement of the screw locations

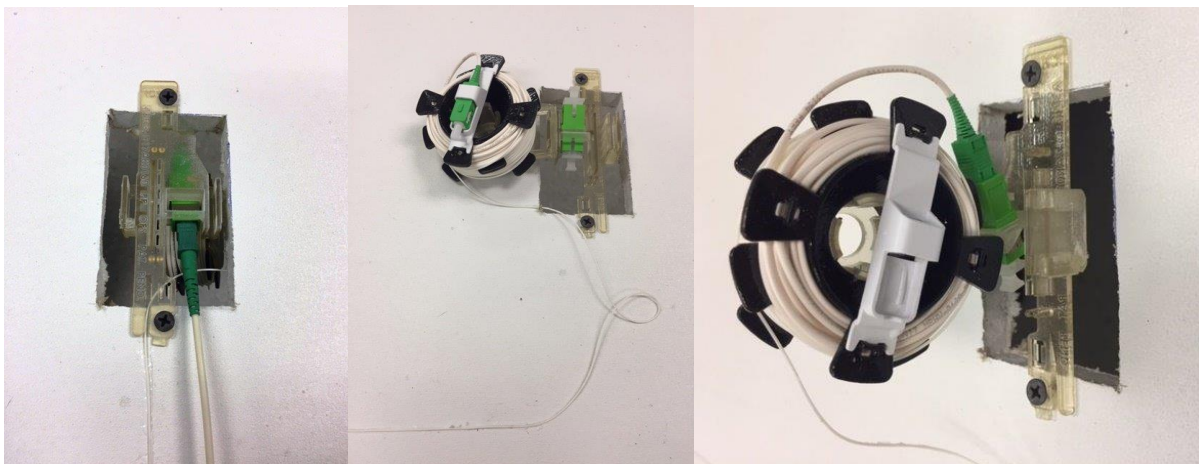
InvisiLight EZ-Hide Module Installation Instructions

- 3.1.2 Secure the Adapter Bracket in the reverse position to the living unit wall with screws over the wall opening. If securing with drywall anchors, a 3/16" drill bit is the proper size for the hole for the anchors. Do not snap on EZ-Hide Wall Plate at this point in the process.



EZ-Hide wall cut template noting screw placement

CAUTION: Prior to drilling and cutting check to be sure there are no electrical wires, pipes, or any other obstacles that may be in the path of the drill. If such obstacles are present move the drilling location to where no obstacles exist.



- 3.2 Prepare the pathway and install the micro-drop

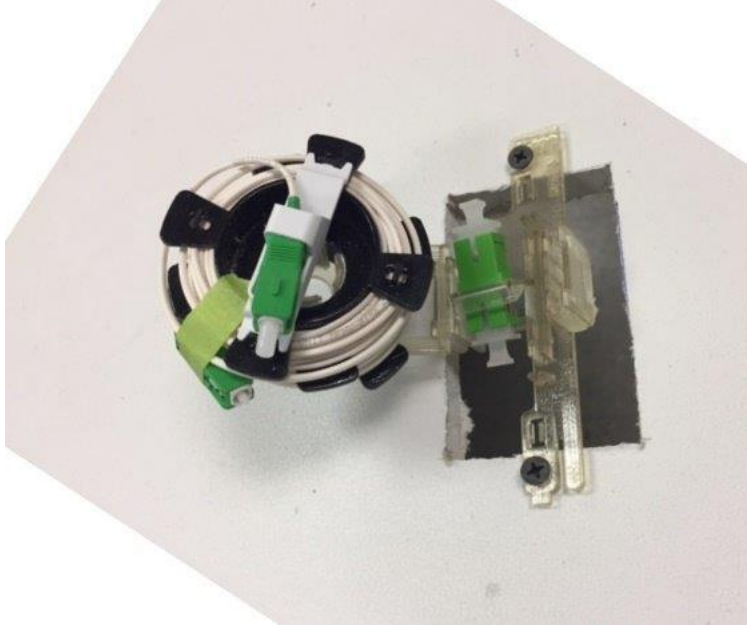
3.2.1 Snap the spool bracket to the adapter bracket so that it swings freely for installing the 900 um InvisiLight fiber.

3.2.2 Prepare the fiber installation path between the fiber entry point and the EZ-Hide module location. For more information about the micro-drop pathway preparation and installation process, please see document D12AK0148.

3.2.3 Place the spool on to the EZ-Hide module flange and verify that it spins freely. See the photos above showing the process of spooling out the 900 μm micro-drop.

InvisiLight EZ-Hide Module Installation Instructions

3.2.4 Carefully remove the tape holding the outside end connector to the spool, and unspool the fiber connector along the selected route.



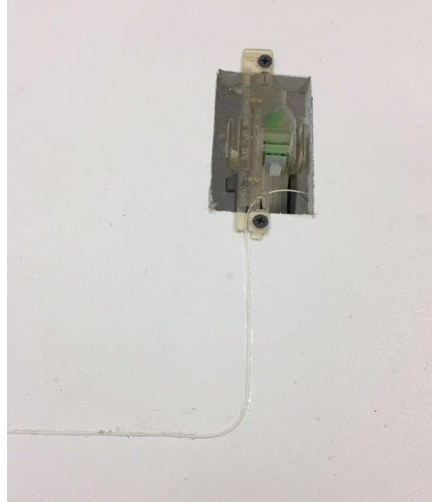
Continue the installation process per the process outlined in OFS installation document D12AK0148 until the fiber is adhered to the surface approximately 1 meter from the module.

3.3 Wall Module Assembly

3.3.1 Adhere micro-drop to a point approximately 1 meter (3 feet) from the wall module. Take up remaining slack onto the spool. Adhere micro-drop up to the entry point of the wall plate. Remove the 2mm up-jacketed from the top layer of the spool and attach it to the adapter or if attaching directly to the ONT spool of the needed length prior to attaching the bracket. Once the micro-drop is fully adhered, flip the bracket so that the spool is inside the wall which will require unscrewing the bracket and then screwing it back in place reversed.

3.3.2 When a separate jumper is used to route to the ONT then open the faceplate to connect one end of the jumper to the adapter behind the faceplate.

InvisiLight EZ-Hide Module Installation Instructions



3.3.3 Place the cover on the module and plug the jumper into the ONT for final assembly.

4 Testing

4.1.1 No active OLT - Use a power meter to record optical insertion loss of the installed EZ-Bend InvisiLight micro-drop assembly using company established testing procedure, between the fiber entry point adapter and into the connector of the EZ Connect jumper.

4.1.2 Active OLT, Option A – Measure the received power (dBm) at the fiber entry point adapter and at the jumper side of the EZ Connect jumper. The difference is the insertion loss of the installed EZ-Bend InvisiLight assembly.

4.1.3 Active OLT, Option B –Connect an EZ-Bend Jumper from the Wall Mount Module to the ONT. If the green light on the ONT is illuminated, installation passes testing.

5 Troubleshooting and Repair

5.1 If test results show excessive loss, inject a “red light” into the connector on either end of the Micro-Drop and the red light will visibly leak at any point where excessive loss or a fiber break exists.

InvisiLight EZ-Hide Module Installation Instructions

- 5.2 If the fiber is broken in a section more than about 0.5 meters (1.5 feet) from a connector, replace the InvisiLight micro-drop.
- 5.3 If the fiber is broken in a section less than about 0.5 meters (1.5 feet) from a connector, cut off the connector and replace it with an OFS fusion splice-on, OFS mechanical connector, or other company approved field installable connector.
- 5.4 If the fiber is broken near the wall module and there is sufficient slack on the spool the slack may be pulled past the break and the broken end may be fusion spliced to the slack end. The fusion splice should be attached (use adhesive) to the wall or molding, and the remaining slack rolled back onto the spool and attached to the wall or molding with adhesive. An alternative method to hide the splice is to drill a hole, drop the splice into the hole, and use a plug and cap to conceal it.

6.0 Ordering Information

Please refer to OFS Document Number fap-313, available at 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) inside the USA or 1-770-798-555 from outside the USA.