

# Fiber Launch Cable

## Model ELC-FCSC20MF1

---

1.	OVERVIEW.....	1
2.	APPLICATIONS.....	1
3.	DESCRIPTION .....	1
4.	INSTALLATION.....	2
5.	CUSTOMER SERVICE.....	2
6.	SPECIFICATIONS .....	2

---

### 1. OVERVIEW

Engenuity's Fiber Launch Cable, ELC-FCSC20MF1, Figure 1, works with OTDRs to eliminate the OTDR dead zone caused by high level reflections returned to the OTDR. Adding a launch cable ensures that the dead zone occurs in the area of the launch cable rather than in the optical fiber under test.

The Engenuity ELC-FCSC10MF1 provides an FC/APC connector for connection to an OTDR and an SC/APC connector for connection to the fiber under test. Between is 20 meters of micro-armored fiber optic cable. It is enclosed in a plastic housing which may be stored in the OTDR carrying case or pouch.

#### Document Status

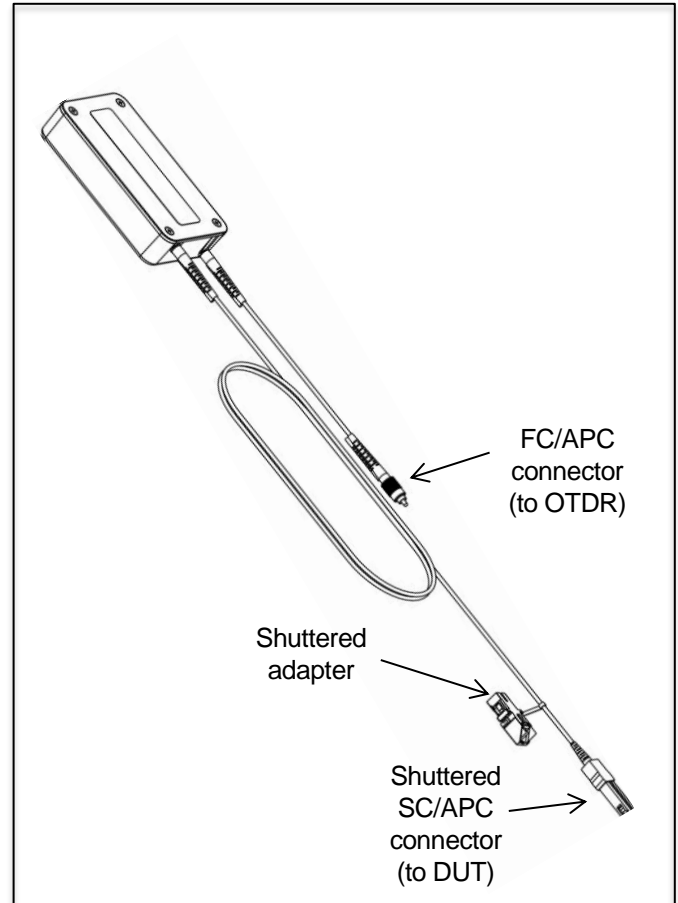
This is the initial release of this document.

#### Product Features

- Micro-armored cable for durability
- Compact, rugged housing
- May remain connected to the OTDR to protect the OTDR test connector
- Protected, shuttered SC/APC-SC/APC adapter for connection to the fiber under test
- 0db attenuator that may be added to protect the launch cable's DUT connector
- 20 meter length

### 2. APPLICATIONS

The ELC-FCSC20MF1 launch cable protects the OTDR from high level reflections and improves the accuracy of testing by moving the OTDR dead zone from the fiber under test and into the launch cable area.



**Figure 1. ELC-FCSC20MF1 launch cable**

### 3. DESCRIPTION

The ELC-FCSC20MF1 is a 20-meter, micro-armored fiber optic cable housed in a compact, rugged plastic case. At one end, the launch cable is terminated with an FC/APC connector for connection to the OTDR. The launch cable may remain connected to the OTDR to protect both the launch cable connector and the OTDR's test connector. At the other end, the micro-armored cable is terminated with a shuttered SC/APC connector for connection to the DUT, device under test. This protects the connector from damage and dust when not in use. An attached SC/APC to SC/APC shuttered adapter supports connections to fibers providing male connectors.

The ELC-FCSC20MF1 also includes a 0dB attenuator that may be placed on the launch cable's DUT connector to provide protection from endface damage during testing. If damaged, the 0dB attenuator may easily be replaced.

#### 4. INSTALLATION

- ① Clean all connector endfaces prior to mating using company best practices
- ② Locate the FC/APC connector on the 10-inch pigtail. Remove the dust cap. Make the connection to the OTDR.

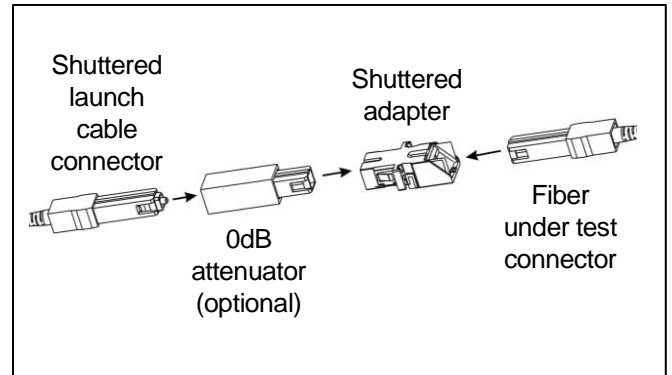
**NOTE: This connection may remain in place if the ELC-FCSC20MF1 is stored with the OTDR in an appropriate carrying case or pouch.**

- ③ When the fiber under test provides a female SC/APC connector port, locate the launch cable's DUT connector on the 48-inch pigtail and connect it to the female SC/APC connector.
- ④ When the fiber under test provides a male SC/APC connector, open the shutter door of the launch cable's adapter and insert the male connector from the fiber under test. Insert the launch cable's DUT connector into the open end of the adapter. If using the 0dB attenuator, place it between the DUT connector and the adapter. See Figure 2.

**NOTE: The 0dB attenuator provides additional protection to the connectors used on the launch cable and the fiber under test.**

- ⑤ Begin optical testing.
- ⑥ At the conclusion of testing ensure dust caps are replaced on the attenuator, the shuttered adapter, and

the launch cable's OTDR connector, if removed from the OTDR.



**Figure 2. Connection to fiber under test**

#### 5. CUSTOMER SERVICE

##### Customer Sales and General Support

Monday through Friday, 8:00 a.m. – 5:00 p.m. CST  
 Toll Free: 800-980-ECOM (3266), Local: 630-444-0778  
 Sales Support: sales@enginuitycom.com

##### Technical Support:

Monday through Friday, 8:00 a.m. – 4:00 p.m. CST  
 Toll Free: 800-841-1005  
 E-mail: support@enginuitycom.com

##### Enginuity Communications

3545 Stern Avenue  
 St. Charles, IL 60174

#### 6. SPECIFICATIONS

##### ELC-FCSC20MF1

Part Number	ELC-FCSC20MF1
Description	20 meter, micro-armored launch cable.
Dimensions of housing	5 x 3 x 1 inches
Connectors	FC/APC for OTDR connection SC/APC, shuttered for connection to fiber under test
Storage Temperature	-40 to 85°C

### Similar products and spares

ELC-FCSC20MF5	5 pack of ELC-FCSC20M; 20 meter, micro armored launch cable with FC connector for the connection to the OTDR
ELC-SCSC20MF1	20 meter, micro armored launch cable with an SC connector for connection to an OTDR
ELC-SCSC20MF5	5 pack of ELC-SCSC20MF1; 20 meter, micro armored launch cable with SC connector for the connection to the OTDR
ENG-ATNSCA0-2	Attenuator, 0dB, in-line, SC/APC male-SC/APC female, 0.25dB max insertion loss, replacement, 2 pack
ENG-SASCAL-10	Adapter, shuttered, SC/APC-SC/APC, lanyard, 10 pack