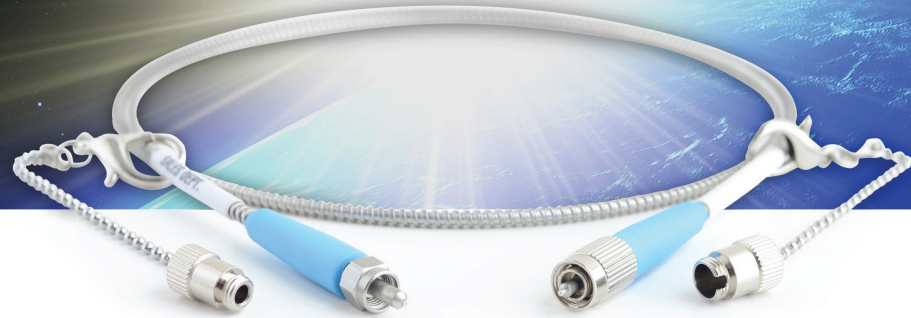


# Fiber Optic Cable Assemblies



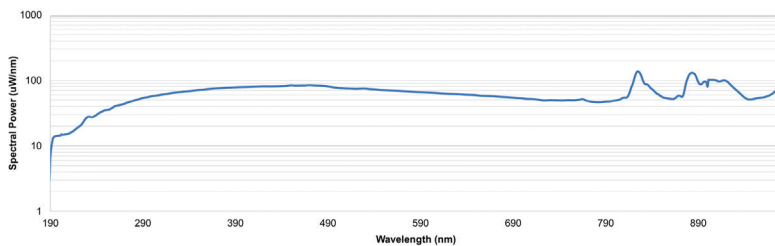
## Cable Assemblies for LDLS™ Laser-Driven Light Sources

Energetiq Technology offers specially designed UV-Vis and Broadband fiberoptic cable assemblies for the Laser-Driven Light Source (LDLS™) products. These multi-mode, single-strand optical cables provide high transmission in the deep UV (190nm) through the visible and into the NIR with resistance to UV degradation.

The premium grade UV-Vis solarization-resistant fibers are available in 115µm, 230µm, and 450µm core diameter sizes. The Broadband fibers are available in 100µm, 200µm, 400µm and 600µm core diameter sizes. Both fibers feature a pure silica core and provide the highest transmission of any optical fiber material available.

The UV-Vis and Broadband fiberoptic cable assemblies have standard FC and SMA 905 connector designs which include Energetiq's proprietary Fiber Protection Technology™. This Fiber Protection Technology allows for better transmission and longer life of the fiber, to meet the demanding requirements of the high brightness LDLS products.

EQ-99XFC Typical Performance: with 230µm diameter, 0.22NA, 1m long fiber



Power ratios	
Fiber (µm)	Estimated Multiplier
115	0.3
230	1
450	2

### EQ-99XFC Spectral Power with 230µm Core UV-Vis Solarization-Resistant Fiber Cable Assembly

## Features and Benefits

- High transmission from 190nm – 2100nm
- Solarization resistant
- 100µm through 600µm core sizes available
- 1 meter and 2 meter cable lengths available
- High damage threshold
- Combined with the EQ-99XFC and EQ-99FC, the cables provide a turn-key system for demanding, high brightness applications

## Specifications

**Connectors:** FC and SMA 905 connectors with proprietary termination design

**Type:** Premium grade, solarization-resistant and broadband fiber optic cable assemblies

**Fiber:** Step-Index, Multimode

**Wavelength Range:** 190nm – 2100nm

**Numerical Aperture:** 0.22 ± 0.02

**Assembly Jacket:** Stainless steel armor with 3.25mm outer diameter

**Operating Temperature:** -50°C to 80°C



## About Energetiq

*Energetiq Technology, Inc. is a wholly-owned subsidiary of Hamamatsu Photonics. Energetiq combines its deep understanding of the plasma physics needed for high-brightness light generation with its long experience in building rugged industrial & scientific products. The result is that users can expect the highest levels of performance combined with the highest reliability.*

## Standard Output Fibers For the EQ-99XFC

### UV-Vis (190-900nm) Solarization-Resistant Fiber Optic Assembly

Part Number	Description
UVFIBERX-115-1M-FC-SMA	FC to SMA – 115µm core diameter, 1 meter long
UVFIBERX-115-2M-FC-SMA	FC to SMA – 115µm core diameter, 2 meters long
UVFIBERX-230-1M-FC-SMA	FC to SMA – 230µm core diameter, 1 meter long
UVFIBERX-230-2M-FC-SMA	FC to SMA – 230µm core diameter, 2 meters long
UVFIBERX-455-1M-FC-SMA	FC to SMA – 455µm core diameter, 1 meter long
UVFIBERX-455-2M-FC-SMA	FC to SMA – 455µm core diameter, 2 meters long
UVFIBERX-115-1M-FC-FC	FC to FC – 115µm core diameter, 1 meter long
UVFIBERX-115-2M-FC-FC	FC to FC – 115µm core diameter, 2 meters long
UVFIBERX-230-1M-FC-FC	FC to FC – 230µm core diameter, 1 meter long
UVFIBERX-230-2M-FC-FC	FC to FC – 230µm core diameter, 2 meters long
UVFIBERX-455-1M-FC-FC	FC to FC – 455µm core diameter, 1 meter long
UVFIBERX-455-2M-FC-FC	FC to FC – 455µm core diameter, 2 meters long

### Broadband (300-2100nm) Fiber Optic Assembly

Part Number	Description
BBFIBERX-100-1M-FC-SMA	FC to SMA – 100µm core diameter, 1 meter long
BBFIBERX-100-2M-FC-SMA	FC to SMA – 100µm core diameter, 2 meters long
BBFIBERX-200-1M-FC-SMA	FC to SMA – 200µm core diameter, 1 meter long
BBFIBERX-200-2M-FC-SMA	FC to SMA – 200µm core diameter, 2 meters long
BBFIBERX-400-1M-FC-SMA	FC to SMA – 400µm core diameter, 1 meter long
BBFIBERX-400-2M-FC-SMA	FC to SMA – 400µm core diameter, 2 meters long
BBFIBERX-600-1M-FC-SMA	FC to SMA – 600µm core diameter, 1 meter long
BBFIBERX-600-2M-FC-SMA	FC to SMA – 600µm core diameter, 2 meters long
BBFIBERX-100-1M-FC-FC	FC to FC – 100µm core diameter, 1 meter long
BBFIBERX-100-2M-FC-FC	FC to FC – 100µm core diameter, 2 meters long
BBFIBERX-200-1M-FC-FC	FC to FC – 200µm core diameter, 1 meter long
BBFIBERX-200-2M-FC-FC	FC to FC – 200µm core diameter, 2 meters long
BBFIBERX-400-1M-FC-FC	FC to FC – 400µm core diameter, 1 meter long
BBFIBERX-400-2M-FC-FC	FC to FC – 400µm core diameter, 2 meters long
BBFIBERX-600-1M-FC-FC	FC to FC – 600µm core diameter, 1 meter long
BBFIBERX-600-2M-FC-FC	FC to FC – 600µm core diameter, 2 meters long

\* For other fiber assembly configurations please contact Energetiq Technology.

