

# SFPOC-LUX<sup>TM</sup>

## High Fiber Count Composite Fiber Optic Overhead Ground Wire (OPGW)

Composite Fiber Optic Overhead Ground Wire (OPGW) is a composite overhead optical ground wire that provides high capacity communication channels to service present and future needs.

SFPOC-LUX<sup>TM</sup> features high optical fiber count providing expanded communication capabilities.

SFPOC-LUX<sup>TM</sup> is custom designed to satisfy each customer's specified communication and groundwire requirements for short circuit current capacity, tensile strength, fiber count and fiber type while complying to ASTM, IEEE or IEC International Standards.

Installation of SFPOC-LUX<sup>TM</sup> is straightforward utilizing standard OPGW hardware and equipment.

SFPOC provides with its product a comprehensive range of services, including type testing, OPGW hardware, installation supervision and training.

### Optical Design Features

SFPOC-LUX<sup>TM</sup> provides the type and number of optical fibers needed to meet customer's specific requirements while complying to ITU-T Standards.

SFPOC-LUX<sup>TM</sup> features optical fibers placed loosely in a hermetically sealed stainless steel tube containing a gel filling compound to form an optical unit. This tube provides protection to the optical fibers during installation and operation under severe environmental conditions.

The optical fibers have low signal attenuation and wide band width allowing for long distance, high capacity communication.

Optical fibers are free from crosstalk and are not subjected to electromagnetic interference and polarization. They provide secure high quality signal transmission.

### Groundwire Design Features

Aluminum-Clad Steel and Aluminum Alloy wires are stranded together with one or more optical units.

The Aluminum-Clad Steel and Aluminum Alloy wires provide the mechanical strength to withstand installation and operating conditions, while achieving the conductivity needed to control temperature rise during short circuit fault conditions.



SFPOC

# SFPOC-LUX™ DESIGN FEATURES

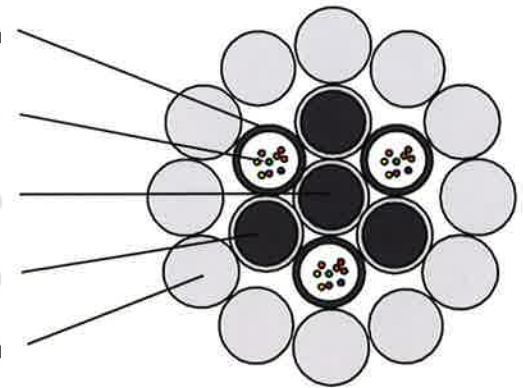
Stainless Steel Tube  $\Phi$ 3.5mm

Optical Fiber

30%ACS  $\Phi$ 3.7mm

30%ACS  $\Phi$ 3.6mm

AAL  $\Phi$ 3.65mm



TYPICAL SFPOC-LUX™ DESIGN	METRIC	IMPERIAL
Fiber count	144	144
Nominal Size	167mm <sup>2</sup>	0.258in <sup>2</sup>
Overall Diameter	18.2mm	0.717 "
Nominal Weight	654kg/km	0.439lb/ft
Minimum Tensile Strength	7330kgf	16,160lbs
Modulus of Elasticity	8090kgf/mm <sup>2</sup>	11,500kpsi
Coefficient of Linear Expansion	19.2 × 10 <sup>-6</sup> /°C	10.7 × 10 <sup>-6</sup> /°F
DC Resistance at 20°C	0.22 $\Omega$ /km	0.35 $\Omega$ /mile
Fault Current Capacity(Ambient=40°C)	250kA <sup>2</sup> sec	250kA <sup>2</sup> sec

## TYPICAL FIBER TYPES AND ATTENUATION

Attenuation	Units	G.652	G.655
1310nm	dB/km	0.36	--
1550nm	dB/km	0.22	0.22

Typical Fiber Types are available in accordance to ITU Standards:G652&655 or IEC 60793,60794

\*SFPOC OPGW custom designed to meet each customer's specific technical requirements.

## Suzhou Furukawa Power Optic Cable Co.,Ltd.(SFPOC)

Our product was successfully type tested at Kinectrics Inc. , Toronto, Canada as per internationally recognized specification. SFPOC is the first OPGW manufacturer in China to have successfully completed all type tests including lightning tests on OPGW.

SFPOC, a joint venture of The Furukawa Electric Co., Ltd. of Japan and Etern (Yongding) Group of China, is a global leader in manufacture and supply of Optical Ground Wire (OPGW).

**Suzhou Head Office & Factory**  
Luxu Industrial Park, Linhu Economic  
Zone, Wujiang.  
215211, Jiangsu, China  
Tel: 86-512-63272657  
Fax: 86-512-63271580  
Http://www.sfpo.com

Toronto Office  
665 Kennedy Road, Suite 106  
Toronto, ON, Canada M1K 5E2  
Phone: 416.264.1427  
Fax: 416.264.0310  
E-mail: sadutta@rogers.com



**SFPOC**