



SOUND SOLUTIONS FROM LIGHT TECHNOLOGY



## FOSA™ 3660 Seismic

### Fiber Optical Accelerometer for Tri-Axial Monitoring Applications

Tri-axis fiber optical accelerometer for remote monitoring of vibration in three orthogonal directions. Ideal for laboratories or where the accelerometer is a sub-component in another device or system.

#### FEATURES

- ▶ Completely passive sensor with no electrical parts
- ▶ Absolute EMI/RFI immunity
- ▶ Exceptionally low noise density
- ▶ Model options suited to a variety of applications
- ▶ Standard analog output
- ▶ Small, lightweight design
- ▶ High reliability and environmental stability
- ▶ Optical fiber connection over extended lengths without signal loss
- ▶ Plug-and-play system
- ▶ Cost-effective, long-term solution

#### TECHNICAL SPECIFICATIONS

Frequency Response ( $\pm 5\%$ )	0.5-80 Hz
Maximum Acceleration	1 g
Noise Density (micro-g/ $\sqrt{\text{Hz}}$ )	<1
Nominal Sensitivity	4000 mV/g
Power Supply	12 V, 300 mA
Output Impedance	<100 Ohm
Phase Shift	0 deg
Amplitude Non-linearity	<5 %
Transverse Sensitivity	<3 %
Base Strain Sensitivity	0.0001 g/micro-m/m
Temperature Range	-20 to +60 °C (-4 to +140 °F)
MTBF	>100,000 hours
Sensor Head	
Material	Polycarbonate
Weight	20 g
Dimensions L/W/H	45/25/22 mm
Optical Cable Length	10 m

#### APPLICATIONS

- ▶ Seismic vibration monitoring
- ▶ Power generation facilities
- ▶ High voltage electrical areas
- ▶ Oil and gas installations
- ▶ Highly explosive areas
- ▶ High RF areas
- ▶ Severe electromagnetic fields
- ▶ Petrochemical/nuclear facilities
- ▶ Aerospace measurements



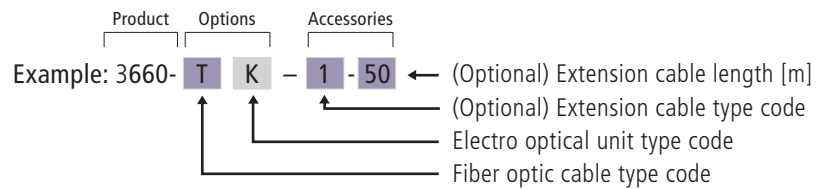
## FOSA™ 3660 Seismic System Kit




Complete, versatile, cost-effective solution





Optoacoustics' FOSA 3660 system is comprised of our tri-axial fiber optical accelerometer, electro-optical unit, output signal cables with BNC connectors, DC power supply and a ruggedized carrying case.

### PRODUCT ORDERING GUIDE

Use the matrix below to select accessories for your order.



Options	Fiber Optic Cable Type		Electro-Optical Unit Type
Item	Black or Clear Teflon Ø 3 mm	Black Polyamide Ø 5.1 mm	EOU 600 Tri-Axis
Code	<b>T</b>	<b>R</b>	<b>K</b>
			

Accessories	Extension Cable Type (Specify length from 10-100 m)			
Item	Outdoor, Milspec Ø 4.5 mm	Outdoor, Armored Ø 6.5 mm	Indoor, Rugged Ø 3.0 mm	Indoor, Zip Cord Ø 3.0 x 2 mm
Code	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
				



SOUND SOLUTIONS FROM LIGHT TECHNOLOGY

Optoacoustics is a leading manufacturer of high performance, optical fiber-based sound and vibration sensors. Each of our products combines the natural intelligence of optics and acoustics to meet technical performance demands which cannot be addressed by conventional sensing solutions. Optoacoustics' pioneering technology is protected by over 20 international patents.

17 Hata'asia Street  
60212 Or-Yehuda  
Israel

PHONE +972 3-634-4488  
FAX +972 3-634-9292  
EMAIL info@optoacoustics.com

Copyright © 2007 Optoacoustics Ltd. All rights reserved. The information appearing here is subject to change without notice. Unless otherwise indicated, all product names are trademarks of Optoacoustics Ltd.

DS-3660S-1 0911