

## Fiber Optic Surveillance Stethoscope (3047)



- *Extremely High Sensitivity*
- *Through Wall Audio Surveillance Solution*
- *Unique Optical Acoustic Technology*
- *Difficult to Detect*
- *Electronics Positioned Far Away From Sensor*
- *Hermetically Sealed, Ideal for Humid Conditions and Permanent Installation.*

In the field of law enforcement surveillance there is often a need for audio monitoring of an adjacent room or space without access or the possibility to install a standard microphone.

The Fiber Optic Surveillance Stethoscope enables listening through concrete walls, doors, and windows without the need to be inside the room. The recording device can be hundreds of meters away from the optical sensor, so there is no need to even be present anywhere near the recorded area. The Fiber Optic Stethoscope can be installed for years as a wall through listening device due to high MTBF and its ability to withstand extreme humidity and temperature environments. The Fiber Optic Surveillance Stethoscope may also be used by special units as a rapid deployment listening device in the case of a hostage or other similar situations.

The Fiber Optic Surveillance Stethoscope is based on a unique optical sensor technology. A beam of light is sent through an optical fiber to a vibration sensitive membrane. Sound signals cause the membrane to vibrate and modulate the intensity of the light being reflected off the membrane, which is

**Goldman Trades Surveillance and Security Equipments**  
57 Charing Cross Road  
London  
WC2H 0NE  
United Kingdom

**Registration No: 05871589**  
**VAT: 911405858**  
**Tel: +44-2072873621**  
**Fax: +44-2072873621**  
**admin@goldmantrades.com**  
**<http://www.goldmantrades.com>**



then translated into an electrical signal. Fiber optic sensor can be installed hundreds of meters away for a long extended periods of time.

### Features:

- High sensitivity
- Great frequency response
- Superior signal-to-noise ratio (SNR)
- Wide dynamic range.
- Available in 5m, 25m, 45m, 65m and custom lengths
- Add optional wireless transmitter for remote listening

Technical Specifications: Supply Voltage	9-15 V DC
Power Consumption	80 mA
Output Impedance	<100 $\Omega$
Noise Density (200-5000 Hz)	<150 nano-g/sqrt (Hz)
Resolution	<10 $\mu$ g
Frequency Response ( $\pm$ 10 dB)	200-5000 Hz
Amplitude Non-Linearity	$\leq$ 5%
Transverse Sensitivity	$\leq$ 5%
Operating Temperature	-20 $^{\circ}$ C to +70 $^{\circ}$ C
Storage Temperature	-20 $^{\circ}$ C to +80 $^{\circ}$ C
MTBF	>100,000 hours
Dimensions, Fiber Optical Stethoscope Head	Height: 20mm Diameter: 35mm
Weight	16 grams

Each system is hand-crafted to exacting standards using the highest quality components and materials available. This industrial grade equipment is specifically designed and built for professional government, military and law enforcement use and is individually burned in and thoroughly tested. For your guarantee of quality assurance it comes with a copy of the engineer's test and calibration sheet.

**Goldman Trades Surveillance and Security Equipments**  
**57 Charing Cross Road**  
**London**  
**WC2H 0NE**  
**United Kingdom**

**Registration No: 05871589**  
**VAT: 911405858**  
**Tel: +44-2072873621**  
**Fax: +44-2072873621**  
**admin@goldmantrades.com**  
**<http://www.goldmantrades.com>**