



# NC301 Fiber Optic Liquid Sensors



**As Seen In:**  
*Sensors Magazine*  
*M&C News*  
*Photonics Spectra*

## Features

- Optical detection of liquids using OSI's patented\* fiber optic sensor technology
- Sensor and cable are immune to EM interference
- Intrinsically safe when detecting volatile substances
- Remote sensing for liquid leak detection
- Solid-State optoelectronic control module
- Easily cleaned sensor probe
- Cable lengths vary from 5m to several kilometers
- Sensor status monitored by warning Indicator, audible alarm, and/or 0..5 V analog output

\* US Patent # 5,684,296 (Int. patents pending)

## Applications

*"Electromagnetically sensitive or volatile environments requiring leak detection"*

- ▲ Aircraft osmosis systems
- ▲ High voltage transformer cooling systems
- ▲ Shipboard damage assessment
- ▲ Water cooled electronics
- ▲ AST/UST overfill leak detectors
- ▲ Natural gas compressors
- ▲ Petroleum processing equipment
- ▲ HVAC/Pump rooms

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## Problem

Electronic Noise – RFI and EMI

Lightning

Hazardous Areas

## Fiber Optic Solution

Electronic noise cannot be introduced into a fiber optic cable.

Non-conductive fiber optic cable provides total electronic isolation.

Fiber optic cables do not carry electric potential and are approved for FM applications.

## TECHNICAL DATA

### Optoelectronic Control Module

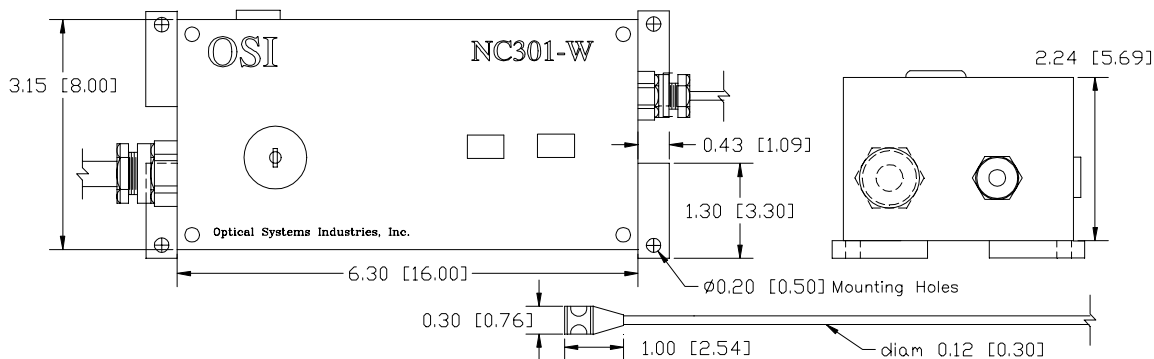
Supply Voltage: 105–125 Vac, 50-60 Hz  
 Operating Temp: -10 C to 60 C  
 Housing: Polycarbonate watertight  
 Nema 4X  
 Fuse Type: 3AG ½ amp

### Cable Assembly

Bend Radius of Cable: 1.5 inches  
 Compressive Strength: 400 N/cm  
 Operating Temp: -20 C to 65 C\*  
 Volume Resistivity: >1x10<sup>-13</sup> ohm-cm

\* High Temp Cables Available

Mechanical dimensions in inches [centimeters]



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