

# Amp LiteWire Fiber Optic Coupled Ammeter

*Slips on and off the conductor*

*Open CT that rejects stray magnetic fields*

*Fiber Optic Isolation brings the signal down to ground*

*Analog output for waveform analysis*



8-016 Wide Jaw Amp LiteWire



In 1988, SensorLink was approached by a power utility with a request to develop a device that would eliminate the mechanical clamp from measurements of current. An inductive sensor was developed that did not use magnetic materials and had no moving parts.

**The opening** of the sensor is electronically closed and external currents are also electronically rejected. This means that a user can measure an individual conductor within close proximity to adjacent current carrying conductors.

**The LiteWire** is a two piece, True RMS ammeter with a fiber optic link between the high voltage sensor and the readout at ground potential. The sensor is mounted on a hot stick and slipped over a high voltage line.

**A fiber optic cable** connects the sensor to a receiver unit at ground potential, which contains the digital readout and an analog output. The instrument has no moving parts and does not require clamping onto the wire. The cases are water resistant and will withstand high physical impact.

**The fiber optic cable** is physically rugged, while providing the high speed data path required for digital waveform transmission from the sensor to the display unit. It also is the high voltage insulator between the two units and is tested to provide 100 kV isolation per foot.

**The analog output** is the unique feature of this instrument. It is a reproduction of the high voltage current waveform, accurate to approximately the 50th harmonic, but available as a 0-2 volt AC signal at ground. This allows the use of many sophisticated low voltage instruments, such as scopes, waveform acquisition recorders, analyzers, and other analysis instruments which would previously not be usable at high voltage.

## Applications

View Current from the primary

Analyze Current Waveform from the primary



## Amp LiteWires Fiber Optic Coupled Ammeter

Model Number	8-015 XT	8-016
Amp Sensor Opening	2.5 in (6.35 cm)	3.86 in (9.84 cm)
Weight:	4.8 lbs. - 2.2 kg	6.0 lbs. - 2.73 kg
Range	0-2000 Amps True RMS	
Accuracy	±1.5%	
Display Resolution	0-200 Amperes: 0.1 Amps 200-2000 Amperes 1 Amp	
Analog Output	1 mv RMS per amp on both the low range and the high range Output connector is BNC. No DC offset voltage.	
Output impedance	6000 ohms minimum	
Frequency response	3000 Hz or to the 50th harmonic	
Battery	9 volt battery power — One battery in each unit Low battery indicator on display for both batteries Battery life between 6 to 8 hours of continuous operation	
Temperature Range	-22 to +140 ° F (-30 to +60 ° C)	
Fiber Optic Isolation	100 kV Per Foot (500kV max)	
Operational Environment	Up to 150 kV	



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