

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 Amp 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 hotstick 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.

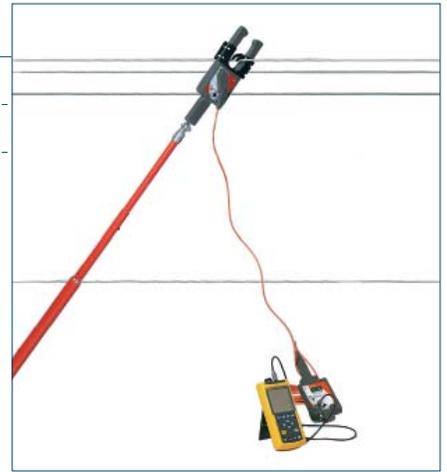
The fiber optic cable is physically rugged, while providing the high speed data path required for digital waveform transmission from the sensor to the display unit. It also is the high voltage insulator between the two units and is tested to provide 100 kV isolation per foot.

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	3.0 lbs, 2.73 kg
Range		
Current	1-2000 True RMS Amps	
Voltage Environment	up to 150 kV	
Accuracy	±1.5%	
Resolution		
1-199.9 A	.1 A	
200 - 2000 A	1 A	
Analog Output	1 mv RMS per amp on both the low range and high range Output connector is BNC. No DC offset voltage.	
Output impedance	6000 ohms, minimum	
Frequency Response	3000 Hz or to the 50th Harmonic	
Fiber Optic Cable		
Length	40', 12.19 m	
Isolation	100 kV per foot, 500 kV max	
Mechanical		
Display	3.5 Digit Display in Receiver	
Housing	Shock & water resistant molded urethane	
Hotstick Mounting	Universal chuck adapter (hotstick not included)	
Battery	Two each 9V alkaline or lithium; one per unit	
Battery Life	Minimum 4 hours of continuous use	
Operating temperatures	-22° to +140° F, -30° to +60° C Lithium battery required for use below -4°F, -20° C	
Optional Accessories		
7-017	Hanger assembly for 8-015 XT	
7-016	Hanger assembly for 8-016	
7045	Hard carrying case	



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