



THE EASTERN SPECIALTY COMPANY

FIBER OPTIC COUPLED AMMETER

CAT. 801

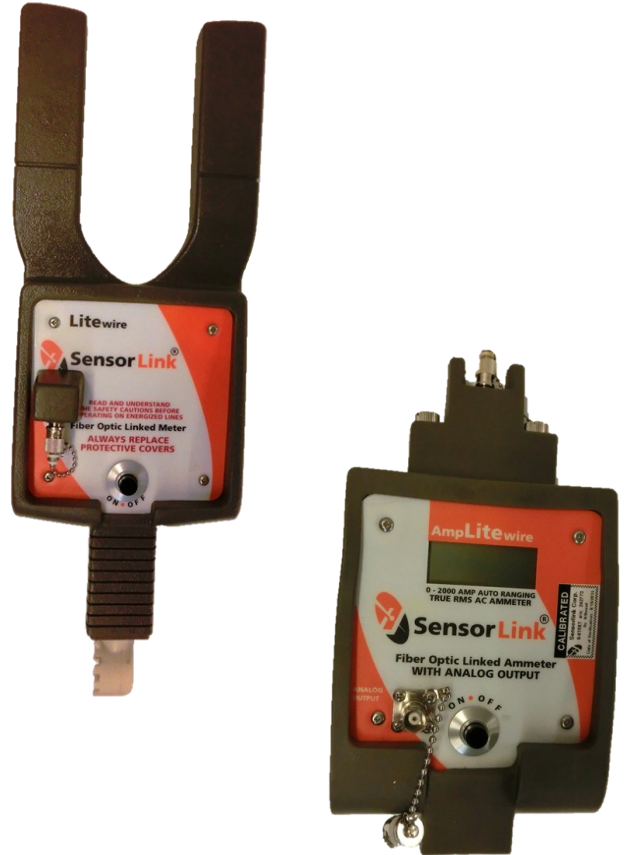
ABOUT

The **TESCO Fiber Optic Coupled Ammeter** was developed using this current sensor technology. It 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.

FUNCTIONALITY

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 molded urethane housings are water resistant and will withstand high physical impact.

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.



SPECIFICATIONS

- **Amp Sensor Opening:** 2.5" (6.35cm)
- **Weight:** 4.8 lbs (2.18kg)
- **Range:**
 - **Current:** 1-2000 True RMS Amps
 - **Voltage Environment:** up to 150 kV
- **Accuracy:** +/- 1.5%
- **Resolution**
 - **1-99.9A:** 0.1A
 - **200-2000A:** 1A
- **Analog Output:** 1mV/Amp, 1-2000 Amps. 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 ft. (12.19m)
 - **Isolation:** 100kV per foot, 150 kV max
- **Mechanical:**
 - **Display:** 3.5 Digit Display in Receiver
 - **Housing:** Shock and water resistant molded urethane
 - **Hotstick Mounting:** Universal chuck adapter (hotstick not included)
 - **Battery Life:** Minimum 4 hours or continuous use
 - **Operating Temperatures:** -4° to 140°F (-30° to 60°C)