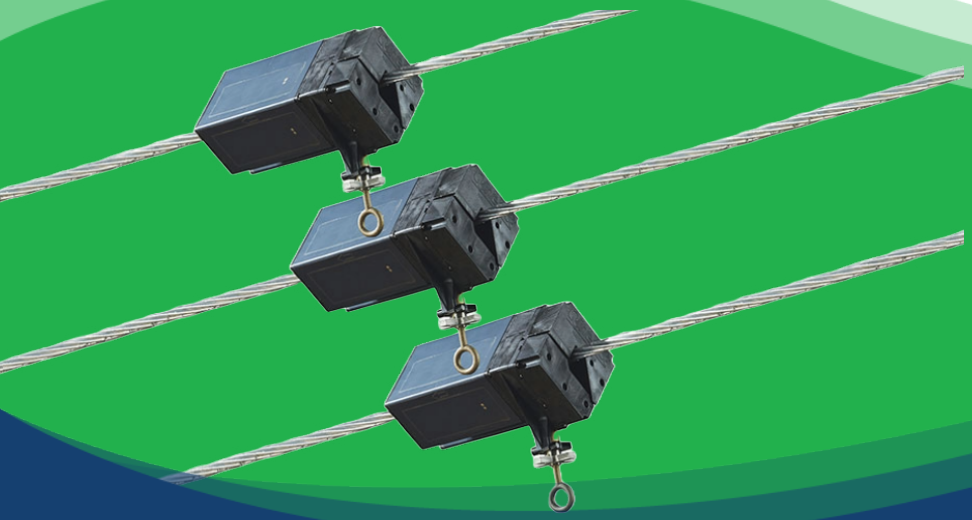
LineWatch™
Powering Grid Awareness



LineWatch M

Distribution Grid Sensing and Monitoring for Medium Voltage Applications

Power performance monitoring of the medium voltage distribution grid without a neutral connection

LineWatch M delivers near revenue grade (0.5%) current and voltage accuracy to address a variety of utility applications. The "bird-on-wire" design supports fast and safe hot stick installation greatly reducing deployment expense and total cost of ownership. LineWatch incorporates a flexible design that supports any utility communications platform.

Market applications:

Grid Automation
Enable remote monitoring and operation of grid infrastructure for more efficient and lower operational cost management.

Volt/VAR Optimization
Sensors can be used as part of a centralized VVO system or locally—an easily installable alternative to instrumentation transformers or line post sensors.

Substation Monitoring
Enables remote monitoring and supervision of critical assets located at substations without need for costly renovations or service interruptions.

Fault Detection and Outage Management
Easily indentify the location of a fault to quicker power restoration.

Asset Management
Asset monitoring for improved management and allocation of capital.

Theft Detection/Anomalous Usage
Identify, reduce and eliminate power theft by deploying sensor technology as an energy balancing tool identifying losses, interruptions and anomalous usage.

Voltage , Current and Power Measurement
Improve the eficiency of the distribution grid by monitoring voltage, real and reactive power

Green Energy/Renewables Integration
Distributed generation interconnection permitting and ongoing monitoring.

FEATURES/BENEFITS

- Delivers near revenue-grade
- (0.5%) current and voltage accuracies
- User configurable alarms/events
- Remote monitoring of grid infrastructure
- Integrated reporting tools
- Data storage up to 30 days
- Browser based user interface
- Grid intelligence for reducing operating and maintenance costs and improving grid stability
- Simple installation; clamp fits a wide variety of conductors and bus bars
- Integrated vol tage and current sensors

C7 TECHNOLOGIES

Technical Specifications			
Sensing System Capabilities			
Available Configuration	Up to 6 Sensors per Data Collector	**Reporting Interval**	60 seconds
Electrical Frequency	50 and 60 Hz	**Rated Current**	400 Arms
Rated Voltage	2.4 to 19.9 kVRMS ϕ to Neutral	**Maximum Current**	600 Arms
Voltage Accuracy	± 0.5%	**Current Accuracy**	± 0.5%
Power & Energy Accuracy	± 1%	**Power Quality**	Computes amplitude of voltage/current up to the 13th harmonic; total harmonic distortion
Power Factor Accuracy	± 24 arc minutes	**Data Storage**	30 days of data; downloadable CSV or .XLSX file
Fault Detection	Waveform capture of fault current as per IEEE 495 (10 kA and 25 kA scales, 4 cycles before fault, 8 after event starts)		
LineWatch M tested to ANSI C12.20 Standard			
Physical and Environmental			
Weight	Sensor – 4.4 lbs. Data Collector – 3.45 lbs.	**Dimensions**	Sensor – 9.1"W x 5.1"H x 10.2"D Data Collector – 10.5"W x 18.1"H x 5.9"D
Operating Temperature	-40°C to 50°C	**Storage Temperature**	-40°C to 85°C
Humidity	0 – 95% RH	**NEMA Rating**	Sensor – IP65 Data Collector – NEMA 4X (6 available)
Environmental Condition	Patent-pending weather resistant sensing method, impervious to rain/snow/etc.	**Conductor Size**	Maximum conductor size: 447 kcmil Minimum conductor size: #2 AWG
Communications and Security			
Communication Option	Wired Ethernet Port	**System Logs**	30 days of storage of 1 minute intervals of measurement, system and status data
	WiFi 802.11 b/g/n	**DNP3 Communication**	DNP3 Level 4+ Subset Definitions
	Cellular Modem Communications Supports 4G LTE Networks and CDMA/GSM	**Communications Protocols**	On demand reporting to a central monitoring or SCADA system compatible via DNP3
	WiMAX		Support also includes TCP / IPv4, TCP / IPv6, UDP / IPv4, UDP / IPv6
	Serial Port for NIC integration		

CO7 TECHNOLOGIES
2525, Louis A. Amos
Montreal, QC, Canada H8T 1C3
(866) 267-0045
info@CO7Tech.com
www.CO7Tech.com CO7