

# CENTURION™ On-Line Oil Dielectric Strength Monitor



**WEIDMAN**  
ELECTRICAL TECHNOLOGY

The CENTURION™ on-line oil quality monitor can cost-effectively monitor changes in oil dielectric strength in transformers, load tap changers, circuit breakers and virtually any oil filled equipment.

## Benefits

- Reduces maintenance expenses
- Extends maintenance cycle
- Extends equipment life
- Reduces capital expenditures
- Reduces equipment failures
- Indicates the need for further detailed oil analysis
- Provides valuable information on oil quality through local annunciation, or integration with a data collection system
- Serves as an excellent first-line defense monitor for all oil-filled equipment
- Provides long term trend in oil degradation
- Detects rapid changes

## Applications

- The only on-line monitor suitable for oil filled equipment, such as:
- Load tap changers
  - Regulators
  - Oil-filled circuit breakers
  - Transformers

## Capabilities

- Real-time in-service oil monitoring
- Sensitive to
  - Moisture
  - Carbon contamination / burning
  - Metallic, fibrous, and other contaminants
- Self-diagnostic and reporting
- Local archive with 30-day history
- Can be mounted in any orientation

## Features

- Rugged, cost-effective, generalized oil quality monitor
- Local red, yellow and green "traffic light" display and alarm contacts
- Integrates with various online monitors via current loop or RS-232
- Easy installation
- Cost-effectively deployed on oil-filled equipment as an oil condition annunciator
- No moving parts or consumables
- Can be correlated with ASTM D877 and D1816 dielectric strength tests
- Two components for easy installation and data access
- Patented Technology

# CENTURION™ On-Line Oil Dielectric Strength Monitor

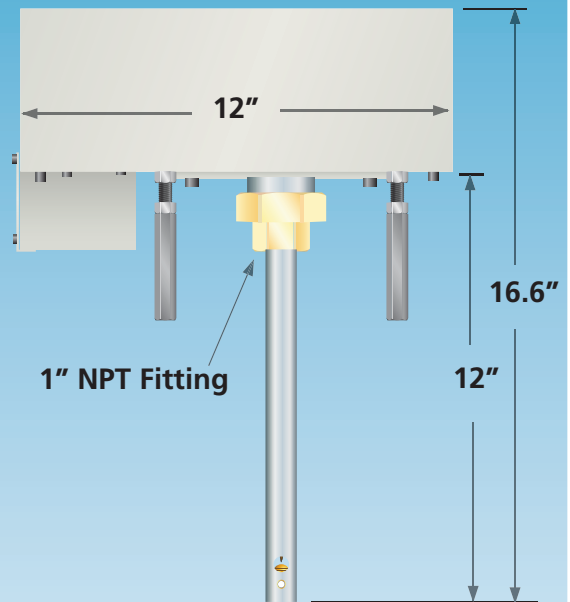
## Sensor Unit In tank, or in-line with filter installation

<b>Sampling Frequency</b>	User selectable - default 6 hours
<b>Probe Interface</b>	1" NPT fitting or larger 1½" or larger NPT "T" fitting
<b>Probe Length</b>	Variable - 1" increments
<b>Environmental</b>	NEMA 4 enclosure -40°C to 60°C
<b>Oil Immersion Temperature</b>	0 to 100°C
<b>Controller Interface</b>	Field assembled PMMA fiber optic interface Maximum distance: 10 meters
<b>Power</b>	115VAC ±20% max. 2 amps 220VAC 130VDC

## Controller Unit

<b>Inputs</b>	6 isolated inputs for dry contacts <ul style="list-style-type: none"> <li>■ 3 designated for operations indications</li> <li>■ 1 designated for low-oil alarm pickup</li> <li>■ 2 general purpose</li> </ul>
<b>Measurement</b>	The CENTURION™ outputs a "Relative Dielectric Strength" measurement which can be correlated to either the ASTM D877 or D1816 measurements
<b>External Indicators</b>	Daylight visible LEDs Green, Yellow, and Red condition indicators
<b>Communications</b>	2 isolated dry contact outputs configurable for alarm set points  Programmable Current Loop: 4-20mA or 0-10mA  RS-232 DSub9, ASCII protocol
<b>Environmental</b>	NEMA 4 enclosure -40°C to 60°C
<b>Power</b>	115VAC ±20% max. 2 amps 220VAC 130VDC

## Sensor Unit Dimensions



### Weidmann-ACTI Inc.

One Gordon Mills Way · PO Box 799  
St. Johnsbury, VT 05819-0799 USA  
800.242.6748 · 802.748.3936 ·  
802.748.8630 fax

email: [service@weidmann-acti.com](mailto:service@weidmann-acti.com)

[www.weidmann-acti.com](http://www.weidmann-acti.com)

### Intelligent Controls

92 Industrial Park Road  
P.O. Box 638 Saco, ME 04072  
TEL: 207-283-0156 FAX: 207-283-0158  
1-800-872-3455

email: [sales@incon.com](mailto:sales@incon.com)

[www.incon.com](http://www.incon.com)



Manufactured by

