

MetPod™ Power Monitor

2005 R&D100 Award Winner!



The MetPod™ is a dielectrically type tested, metering-class measurement solution suitable for transmission and distribution utility applications. Novel oil and SF₆-free voltage and clamp-on current sensors are seamlessly integrated with a high accuracy electronic meter, self-diagnostics, long-range wireless transceiver and a self-contained power supply with extended standby capability.

Applications include:

- Power theft detection
- Cost-effective distribution feeder monitoring
- Monitoring at sub-transmission line taps
- Metering within or between utilities
- Metering of distributed generation assets
- Load flow studies

The MetPod measurement system satisfies 0.2% metering accuracy requirements from -20 to +50 C, with extended temperature ranges of -50 C and +85 C available. The MetPod Lite is available with several meter solutions. The FieldMetrics meter imports data directly into Microsoft Excel™ or a standard text file. Metering solutions from several AMI vendors are also available for seamless integration into AMI systems that have already been deployed.

Weighing less than 10% of same-class conventional equipment, the MetPod accommodates many mounting schemes. A variety of optional accessories are available to enhance connectivity between the MetPod and new or existing smart grid infrastructure.

The modular design allows flexibility to address a wide range of voltage classes. The MetPod is currently available for applications from 4 kV to 138 kV. Contact FieldMetrics® regarding other voltage classes and features under development.



FieldMetrics®, Inc.
13352 82nd Avenue
Seminole, Florida 33776 -3126 USA
Lab: 9021 Oakhurst Rd., Suite A

Phone: 727-698-1742
Fax: 727-231-0729
Email: sales@fieldmetricsinc.com
<http://www.fieldmetricsinc.com>

MetPod™ Power Monitor

Typical Specifications (34.5kV)

Dielectric:

Voltage Class	34.5 kV
AC withstand 1 minute	70 kV rms
AC wet test 1 minute	70 kV rms
BIL full wave, 15 each polarity	200 kV peak
BIL chop wave, 2 each polarity	230 kV peak
Partial discharge, 25 kV, 1 min.	<2 pC
Strike distance	13 inches / 339 mm
Creepage distance	36 inches / 930 mm
IEC Pollution Class	II

Measurement:

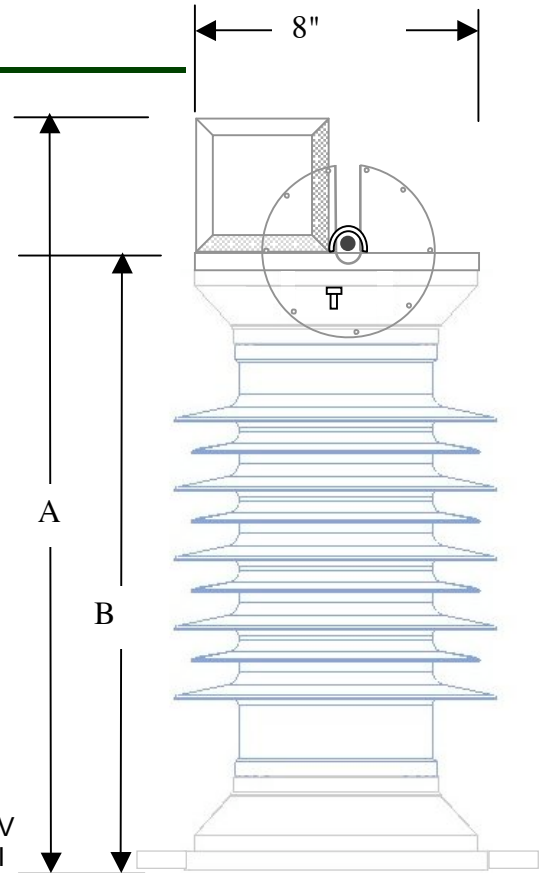
AC nominal voltage	20 kV rms
AC nominal current	600 A rms
Accuracy Class	0.2%
Dynamic range- voltage (1)	70% - 190% of rated V
Dynamic range- current	<1% - 200% of rated I
Short time current rating	20 kA crest
Temperature range(2)	-20 to +50 C
(1) extended voltage range to 30% of rated voltage available.	
(2) extended accuracy to -50 C and +85 C available.	

Communications:

Modulation technique	FHSS FSK
Transmit power	up to 1 Watt
Range(3)	up to several miles
Baud rate	adjustable up to 115K Baud
Computer interface	RS-232 or USB
Data format	Microsoft Excel™ or text file
(3) varies with installation specifics	

Other:

Standard maximum conductor diameter	0.75 inches / 336 kcmil ACSR
Max. Temperature range	-50 to +85 C
Height A	21.5 inches / 546 mm
Height B	17.5 inches / 445 mm
Weight	28 pounds / 14.5 kg
Insulating gas	Nitrogen
Gas pressure at 20 C	15 psig / 1 bar gauge



FieldMetrics®, Inc.
13352 82nd Avenue
Seminole, Florida 33776 -3126 USA
Lab: 9021 Oakhurst Rd., Suite A

Phone: 727-698-1742
Fax: 727-231-0729
Email: sales@fieldmetricsinc.com
<http://www.fieldmetricsinc.com>