

LINE RATINGS

Operating Voltage	4kV - 34.5kV (ph-to-ph)
Operating Current	0 - 600A
Conductor Sizes Supported	1/0 - 500 AAC (0.398" - 0.811" dia.)
Max Conductor Temperature	250° F (120C)

ELECTRICAL MEASUREMENTS

Voltage	+/- 3% V
Operating Current (14A - 600A)	+/- 0.5% A
Fault Current (0kA - 30kA)	+/- 0.5% A
Fault Current Tolerance	30kV
Electro-Magnetic Field (EMF)	+/- 0.5% V/m
Energy	+/- 3% kWh
Power	+/- 5% (W, VA, VAR)
Phase Angle	+/- 1% deg
Power Factor	+/- 3%
Frequency (45Hz-65Hz)	+/- 0.5% Hz
Current Harmonics	Up to 46th @ +/- 1.5%
Voltage Harmonics	Up to 46th @ +/- 1.5%

COMMUNICATIONS

Radio Frequency	915MHz or 2.4GHz
Security	ISO 27001 (SOC 2 Type 2 Compliance)
Wireless Range, 900MHz	2.5 miles
Wireless Range, 2.4GHz	800 feet
Sensor Configuration	Remote, Over-The-Air Programming

POWER SUPPLY

Base Unit Primary Power	120/240V
Base Unit Supplemental Power	Optional Dual 120/240V
Base Unit Backup Power	Optional 24hr. Battery
Sensor Power	Supplied by Base Unit

PHYSICAL MEASUREMENTS

Conductor Angle	+/- 0.1 deg
Conductor Clearance	+/- 1% ft
Conductor Sag	+/- 1% ft
Conductor Swing	+/- 0.1 Hz
Conductor Temperature	+/- 1% C
Conductor Tension	+/- 2% N
Conductor Vibration	+/- 1% Hz

ENVIRONMENTAL MEASUREMENTS

Ambient Temperature	+/- 1%
Humidity	+/- 3%

SENSOR CHARACTERISTICS

Dimensions/Weight	Base Unit: 12"x10"x6"; 11 lbs Sensor: 3.5"x3.5"x63.5; 4 lbs
Sensor Tethers	Non-conducting for power & data
Operating Temperature	- 40° F to + 150° F (- 40° C to + 65C)
Mounting Method	Manual or Hotstick
Material	Aluminum + UV Stable Polycarbonate
Expected Lifespan	15 yrs

APPLICATIONS

• Fault Location (+/- 150 ft)	• On-Demand Read
• Fault Detection	• Phase Identification
• Current Leakage Detection	• Threshold Alarms
• Current Detection	• Full Harmonic Report
• Dynamic Line Rating	• High-Impedance Fault Detection
• Load Monitoring	• Broken Wire Detection
• Ice Accretion Detection	• DER Impact Analysis
• Line Gallop Detection	• Conductor Clearance
• Conductor Health Report	• Pre-Failure Detection
• Voltage Issues	• ADMS/DMS/OMS Integration



MSU - X

Electrical Grid Monitoring
9301 Oaksdale Ave., Ste 170
Chatsworth, CA 91311

www.EGM.net