

AMU-214

AUXILIARY MONITOR UNIT FOR ITS CABINETS

Provides the voltage and current data acquisition function of the cabinet monitoring system.

FEATURES

- Meets all requirements of the ASHTO/ITE/NEMA Intelligent Transportation System Standard Specification for Roadside Cabinets v01.02.17b
- Dual Mode Configuration
- Output File Address Jumpers Programming
- Standardized Communications
- Load Current Monitoring
- EDI RMS-Engine

HIGHLIGHTS

- Internal Diagnostics
- Address Reporting
- Off-Line Power Supply
- Field Signal Interface
- Up to 4 units can be installed with each CMU-212 providing the flexibility of 10 different cabinet configurations



ITS CABINET COMPATIBLE

Dual Mode Configuration

Capable of measuring true RMS voltage and total RMS load current for 14 load switch channels (42 AC inputs) in a 14 position Output File, or 6 load switch channels (18 AC inputs) in a 6 position Output File.

AMU Programming

Output File address jumpers program the AMU-214 configuration. No other user setup is required.

Standardized Communications

The AMU-214 uses real-time standardized high speed communications with the CMU-212 Cabinet Monitor Unit to send a complete RMS voltage and current measurement set every 20 milliseconds.

Load Current Monitoring

Load current measurements are taken for each load switch channel (R+Y+G) using four scales of load current monitoring precision. Using 1, 2, 3, or 4 primary turns on the Output File sensing transformer allows the load current accuracy to be tailored to the application.

EDI RMS-Engine

A DSP microprocessor converts ac input measurements to True RMS voltages and currents, virtually eliminating false sensing due to changes in frequency, phase, or sine wave distortion.



Internal Diagnostics

A complete set of internal diagnostic self-tests are run continuously to help ensure the measurement system and all critical components of the AMU-214 are operating correctly.

Address Reporting

A front panel LED indicator can be used to report the current Output File address assignment of the AMU-214 for cabinet configuration verification.

Off-Line Power Supply

A simple but robust off-line power supply design eliminates bulky transformers and reduces cost and complexity.

Field Signal Interface

Discrete $\frac{1}{2}$ watt resistors along with integrated transient suppressors ensure a highly reliable and rugged interface to the AC field signals, proven over the years by thousands of EDI signal monitors.

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