

CMU-212

ITS CABINET MONITOR UNIT



The EDI CMU-212 Cabinet Monitor Unit is intended to operate with the AMU-214 Auxiliary monitor Unit to form a compact and modular cabinet malfunction management system for the ITS Cabinet. The CMU-212 functions as the main cabinet fault monitoring component. It offers the broadest fault coverage of any monitoring system and incorporates full event logging and status reporting, providing the signal technician with powerful monitoring and trouble-shooting tools to ensure that cabinet malfunctions are detected, diagnosed, and repaired with confidence.

The CMU-212 meets all requirements of the *ASHTO/ITE/NEMA Intelligent Transportation System Standard Specification for Roadside Cabinets* version 01.02.17b, as well as the *Caltrans TEES*, August 2002 requirements.

CMU-212 ENHANCED FEATURES

- Configuration:** Capable of monitoring up to 28 physical load switch channels (RYG) plus 4 virtual channels for a total 32 channel capacity.
- CMU Programming:** Complete CMU-212 programming is provided by an interchangeable Datakey™ nonvolatile memory device. This rugged key stores all CMU-212 configuration parameters and eliminates programming using jumpers, diodes, or DIP switches. Monitor programming parameters can be easily developed using the software wizards provided by the EDI MonitorKey™ Programming Tool.
- Standardized Communications:** Real-time SDLC communications with the Advanced Transportation Controller (ATC) provides complete monitor status to the ATC including field status, fault status, and configuration programming.
- Load Current Monitoring:** Using the load switch current information from the AMU-214, dark intersection approaches resulting from a no-load condition can be detected at the time of the fault rather than waiting for the signal to cycle.
- Field Check Monitor:** The CMU-212 analyzes the ATC output commands and field input status to isolate whether the cabinet fault was caused by an ATC malfunction or a failure in the load bay or field wiring, and identifies the faulty channel and input directly.
- Event Logging:** The CMU-212 maintains a nonvolatile event log recording the complete intersection status as well as previous fault events, AC Line events, configuration changes, monitor resets, cabinet temperature and true RMS voltages for all field inputs. A real time clock stamps each event with time and date.
- Signal Sequence History Log:** The Signal Sequence History Log stored in nonvolatile memory graphically displays up to 30 seconds of signal status prior to the fault trigger event with 50ms resolution to ease diagnosing of intermittent and transient faults.
- ECom™ PC Software:** Access to the CMU-212 data is provided by the industry standard EDI *ECom™* Windows based software for status, event log retrieval, configuration, and data archival.
- MonitorKey Programming Tool:** The EDI MonitorKey Programming Tool provides a simple but complete solution to programming the CMU-212 parameters into the Datakey™. The software includes a Parameter Setup Wizard that simplifies the initial set-up of the parameter database.

