MMU2-16LEip

Malfunction management unit for NEMA cabinets

NEMA

Use the built-in Setup Wizard to quickly configure the SmartMonitor® to the requirements of the cabinet and intersection.

Features

- NEMA TS2-2016 Standard
- Setup Wizard
- Diagnostic Wizard and help system
- Standardized communications
- Program card memory
- 16 channels
- Supports Flashing Yellow Arrow modes A-L

Highlights

Simple setup: Many intersections can be completely configured by answering just 3 guided questions.

Smart configuration memory: Save a completed configuration as a file and transfer it to other monitors.
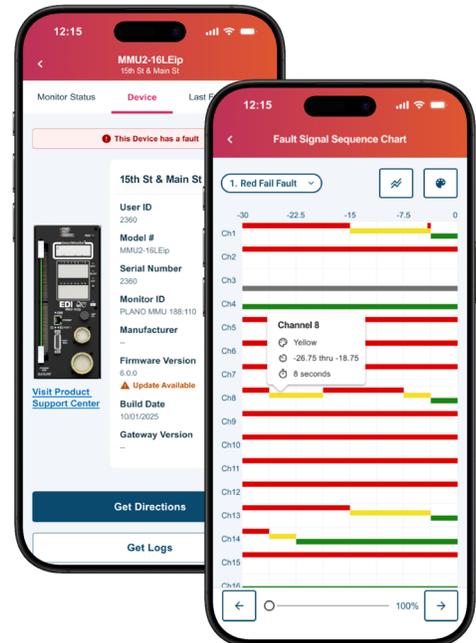
Actionable diagnostics: Guided troubleshooting with recommended resolutions.

What is SYO™?

SYO is an intelligent maintenance and operations ecosystem that provides supervisors and technicians with near real-time visibility across their EDI signal monitors.

Improve uptime with faster detection and response, and reduced field visits by diagnosing problems before dispatching technicians. Learn more: synapse-its.com/SYO

- Text and email alerts sent directly to you, with on-call and vacation options.
- Work from the field or office with SYO App (Apple and Android™) or SYO Web.
- See all your devices on a map with live status view or drill down for more critical device or fault details.

NEMA Standard

NEMA TS2-2016 Standard	Meets all specifications of the NEMA Standard TS2-2016 for the MMU2 configuration while maintaining compatibility with NEMA TS1-1989 Assemblies.
NEMA Flashing Yellow Arrow PPLT	Supports MUTCD Flashing Yellow Arrow PPLT operation and meets / exceeds the NEMA Standard MMU2 requirements of TS2-2016 FYA, providing modes for both TS-2 or TS-1 cabinet configurations.

Standardized communications

Real-time SDLC communications with the Controller Unit exchanges field input status, Controller Unit output status, fault status, MMU programming, and time and date.

Full intersection & status display

Two high-contrast, large area Liquid Crystal Displays (LCD) continuously show full RYG(W) intersection status. A separate graphic LCD provides a menu driven user interface to status, signal voltages, configuration, event logs, and the Help system.

Field check monitor

The MMU2-16LEip analyzes the controller output commands and field input status to isolate whether the cabinet fault was caused by a controller malfunction or a failure in the load bay or field wiring, and identifies the faulty channel and input directly.

Logs

Event logging	A time-stamped nonvolatile event log records the complete intersection status as well as AC line events, configuration changes, monitor resets, temperature and true RMS voltages.
Signal sequence history log	The five signal sequence history logs stored in nonvolatile memory graphically display up to 30 seconds of signal status prior to each fault event.

Wizards

Setup Wizard	Use the built-in Setup Wizard to configure the NEMA Enhanced settings of the SmartMonitor® by answering a short series of questions regarding intersection design and operation.
Diagnostic Wizard and help system	The Diagnostic Wizard automatically pinpoints faulty signals and offers trouble-shooting guidance. The integrated help system provides context sensitive operational assistance.

TS-1 Type 12 with SDLC mode

The MMU2-16LEip SmartMonitor® can be configured to operate with the Port 1 SDLC function and Diagnostic Wizard enabled in a TS-1 twelve channel cabinet with no cabinet wiring changes.

Program card memory

Enhanced settings of the MMU2-16LEip SmartMonitor® are stored in nonvolatile memory on the EDI Program Card. Moving the Program Card to another MMU2-16LEip automatically transfers all settings.

LEDguard®

This EDI innovative signal threshold technique can be used to increase the level of monitoring protection when using LED based signal heads.

EDI RMS-Engine

A DSP coprocessor converts AC input measurements to true RMS voltages, virtually eliminating false sensing due to changes in frequency, phase, or sine wave distortion.

ECcom PC software

Access to the MMU2-16LEip data is provided by the industry standard EDI ECcom Windows based software for status, event log retrieval, configuration, and data archival.

SYO ecosystem

Interfaces	SYO App (Apple, Android), SYO Web. Contact us for SYO API integration. Download on the App Store GET IT ON Google Play
User management	Role-based access and audit logs. Optional single-sign-on (SSO) with company email. Secure login with user authentication. SYO App works with a mobile phone's biometrics.
Device monitoring & alerts	Centralized monitor dashboard, refreshed every half second (communications, health, other data). SMS text and email alerts (faults) with on-call + vacation options. Data aggregation and storage.
Live device status	See channel status, channel voltage and more.
Remote access to logs	Fault Signal Sequence, Monitor Reset, AC Line, Previous Fail, Configuration and more.
Device configuration	View and share most recent configuration changes for each monitor.
Security	Zero-trust architecture with encryption from agency network to hosted environment.