

## FEATURES & CAPABILITIES

The Malfunction Management Unit (MMU) 516L-E monitors up to 16 traffic signal channels for conflict, improper sequencing, incorrect timing, and improper signal voltage levels. The MMU 516L-E is fully compliant with NEMA Standard TS2-2003. The MMU 516L-E is also capable of operating in older TS1 type cabinets, and is compatible with 12-channel Conflict Monitor Units conforming to the NEMA Standard TS1-1989.

- High speed internal data transfer and communications via an SDLC port
- High speed external data transfer via an optional RS-232 port
- Full LCD Screen w/ Menu-Driven, Easy to Use Software
- LED indicator lamps for operation analysis
- Removable program card
- High performance machine tooled sockets for integrated circuit mounting
- Meets & exceeds NEMA TS2 specifications

## SPECIFICATIONS

### PROGRAMMING

Minimum flash; 0-16 seconds  
Short yellow per channel  
Programmable sequence monitor  
Latch selectable option

### INDICATION

Conflict LED  
Red Fail LED  
24 V-1  
24 V-2  
Controller Voltage Monitor  
Red+Yel Clearance  
Clearance  
Diagnostics  
Port 1 Fault, Tx, Rx  
Program Card Ajar  
Indication Fail LED  
Field Check  
Power LED  
Type 12 Mode

### ENVIRONMENTAL

Temperature: -30° F to 74° C  
Humidity: <95% non-condensing to +43° C

### DIMENSIONS

10.5" X 4.5" X 10.9"

### POWER

Line Voltage: 75 to 140 VAC, RMS  
Line Frequency: 57 to 63 Hz, 60Hz nominal  
Power Consumption: 10 watts, typical  
Fuse, Front Panel: 0.5A

### MONITORING VOLTAGE

Pickup: 96 +/- 2.5 Volts AC, RMS  
Dropout: 91 +/- 2.5 Volts AC, RMS  
Hysteresis: 4 +/- 1.0 Volts AC, RMS

