

## MR-3500 Series

### Intelligent Fire Control Unit & Agent Release Control Unit



MR-3500 with two optional RAX-1048TZDS modules

### Description

Secutron's MR-3500 is a series of powerful Intelligent Addressable Fire Alarm Control Units which include Release Control Units (RCUs). These panels are UL 864Rev 9 and ULC S527-2011 listed for fire control and releasing service.

The MR-3500 is recommended for both new and retrofit special-hazard/critical- infrastructure suppression/special agent applications. Small in enclosure size yet powerful enough to deliver complex programming requirements, the MR-3500 is fully expandable.

The MR-3500 provides up to three addressable Signal Line Circuits (UL's-SLC or ULC's-Data Communication Links-DCLs) and connects up to 954 addressable devices/points. Capable of releasing up to six discrete physical hazard zones, the MR-3500 offers exceptional value for complex installations.

Elegant configuration options by onsite laptop, or when required by the Engineer of Record, by remote PC via modem, the MR-3500 can be operational with minimal set up time.

Programming versatility makes the MR-3500 Series the ideal choice for dependable fire detection, signaling and protection in industrial, commercial and institutional buildings. Typically these environments require agent-based suppression solutions easily managed by the MR-3500 Intelligent Addressable Release Control Unit.

### Features

- One onboard SLC/DCL communication circuit that supports up to 318 addressable devices/points;
- Expandable to three SLC/DCL communication circuits that supports up to 954 addressable devices/points;
- Reliable and industry proven dedicated releasing power supply;
- Six dedicated hazard zone LED indicators;
- Convenient USB Programming port;
- Built-in UDACT/DACT for remote monitoring;
- Enhanced tactile response for operator interface;
- 4 x 20 character Liquid Crystal Display (LCD);
- Easy to read numerical keypad;
- 10 Ampere (Amp.) Power Supply to satisfy typical releasing load requirements;
- Four Class A/B Notification Appliance Circuits (NAC) rated at 1.5Amp. each;
- SLC is capable of NFPA 72 Style 4, Style 6, or Style 7 wiring & ULC's DCL-A & DCL-B;
- Resettable auxiliary power supply;
- Four easy to read status queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Building Safety (Formerly Monitor) Input visual indications;
- Supports up to seven remote annunciators;
- Accessible multifunction RS-232 port for:
  - Serial Communication interface
- RS-485 Interface for remote LCD/LED Annunciators and other devices;
- Optional City Tie/Polarity Reversal module for central station monitoring.



## Mechanical Features

- The MR-3500 supports both flush and surface mount applications;
- Dimensions 26" x 14.5" x 4.2"  
66 cm x 36 cm x 11 cm
- Modular display placement options;
- Fits up to 2, 18 Ampere Hour batteries.
- Durable CAT-30 lock and key.
- Removable enclosure door.
- Easy access to all modules for serviceability.

## Software and Operational Features

Audible alarm response within three seconds of activation in Advanced Protocol mode (when using AP devices only);

- AP is a completely digital protocol;
- AP is an Interrupt base protocol;
- Individual LED Control;
- Releasing capability for up to 6 Zones
- Supports Pre-Action/Agent Release and Deluge Applications;
- Supports up to 3 SLC loops and 954 points
- Supports CLIP and AP System Sensor protocols;
- Built-in strobe synchronization support for Mircom, System Sensor, Gentex and Wheelock protocols;
- Grouped inputs and outputs;
- NACs can be configured as Silenceable or Non-Silenceable for both signals and strobes;
- Group bypass with built-in false alarm prevention technology;
- Zone Counting;
- Built-in Drift Compensation for AP protocol;
- Positive Alarm Sequence;
- Configurable Signal Silence Inhibit, Auto Signal Silence, Two Stage Operation and One-Man Walk Test;
- Relay contacts for Common Alarm, Auxiliary/Alarm (Disconnectable), Common Supervisory and Common Trouble;
- Two event history logs comprised of a 400 event alarm log for alarm related events and a 400 event general log for all other events;

## Additional Features

- Compatible with INX-10A Addressable Intelligent NAC Expander Panel.
- Supports Acclimate smoke detection sensors.



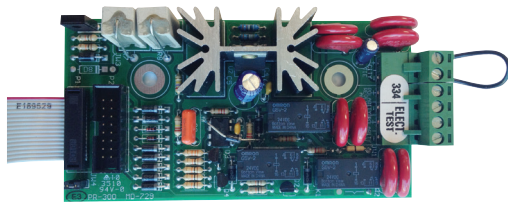
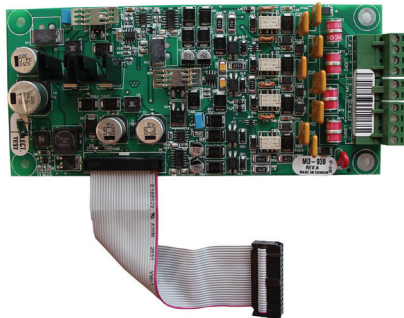
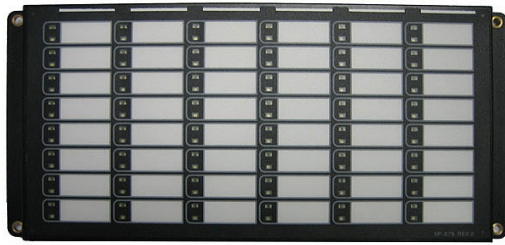
## Sensors can be configured as:

- Alarm Input
- Priority Alarm
- Verified Alarm
- Latched Supervisory
- Non-Latching Supervisory
- Monitor
- Trouble Input

## MR-3500 Features and Benefits

- Cross-zoned or Counting Zone Smoke Detection programming to enable release by either counting active zone detection circuits or active cross-zoned detection circuits (includes options for single, double, triple and 2 different inputs counting zones)
- The MR-3500 Series RCUs are fully expandable to meet the demanding requirements for mission critical facilities, both inside the high value asset areas and also in the office environments.

## Optional Adder Modules



### RAX-1048TZDS Programmable LED Annunciator Module

The RAX-1048TZDS Programmable LED Annunciator provides the MR-3500 with 48 Programmable Alarm/Supervisory Bi-colored LEDs & 48 Trouble LEDs which can be configured as: Alarm (Red), Supervisory (Amber), Trouble (Amber) or Monitor (Amber). The RAX-1048TZDS mounts in the MR-3500 enclosure.

### ALC-636 Dual Loop Controller Module

The ALC-636 Dual Analog Loop Controller Module provides two additional Signaling Line Circuits (SLC) to the MR-3500 consisting of 159 intelligent sensors and 159 intelligent modules per loop. The ALC-636 mounts in the MR-3500 enclosure.

### PR-300 Polarity Reversal/City Tie Module

The PR-300 provides outputs for city box and polarity reversal applications. As a city tie module the PR-300 provides an interface between the control panel indicating circuits and a master box. As a polarity reversal module the PR-300 provides an interface between the control panel and a reverse polarity receiver.

## Remote Annunciators



### RAM-3500-LCD Remote LCD Annunciator

The RAM-3500-LCD provides remote annunciation through a 4 line by 20 character LCD display. It is a direct mimic of the main panel display so that the LCD, LEDs and switches are an exact duplicate of the main display. The RAM-3500-LCD provides control switches for System Reset, Signal Silence, Fire Drill and Acknowledge, four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitor, along with a numeric keypad to access the menu functions. The RAM-3500-LCD mounts in separately orderable single unit enclosures or in larger enclosures that support up to two optional RAX-1048TZDS remote LED annunciators. All remote enclosures are equipped with a CAT-30 Lock and key.

### RAX-LCD-Lite Remote LCD Annunciator

The MR-3500 also supports the RAX-LCD-LITE Remote LCD Annunciator. The RAX-LCD-LITE display mimics the main Fire Alarm Panel display at a remote location. It is equipped with a large 4 line x 20 character back-lit alphanumeric LCD display that uses a simple menu system complete with a directional keypad and switches for Enter, Menu, Cancel and Info. There are five types of enclosure available: the MMX-BB-1001, MMX-BB-1002, MMX-BB-1003, MMX-BB-1008, and MMX-BB-1012 which can take 1,2,3,8,12 chassis respectively.

## Ordering Information

Model	Description
MR-3500	Single Loop, 318 Point Intelligent Fire Alarm Control Unit with built-in UDACT/Digital Communicator, expandable to 954 points with ALC-636 Dual Loop controller module. Includes UB-1024DS back box and DOX-1024DSR red door.
MR-3500RCU	All features of the MR-3500 plus releasing capability included.
<b>Optional Adder Modules</b>	
ALC-636	Dual Loop Controller Module
PR-300	Polarity Reversal/City Tie Module
PCS-100	Power Supply Interface Board
<b>Remote Annunciators</b>	
RAM-3500-LCD	Remote LCD Annunciator with 4-line display. Mounts in a BB-1000 Series enclosure.
RAX-LCD-Lite	Remote Annunciator with Large LCD display. Mounts in a BB-1000 Series enclosure.
RAX-1048TZDS	Programmable Remote LED Display Adder with 48 programmable bi-colored LEDs and 48 Trouble LEDs. Mounts in a BB-1000 Series enclosure.
RAM-1016TZDS	16 Zone Remote LED Annunciator with trouble LEDs. Mounts in a BB-1000 Series enclosure.
RAM-1032TZDS	32 Zone Remote LED Annunciator with trouble LEDs. Mounts in a BB-1000 Series enclosure.
AGD-048	Graphic Annunciator Adder Driver Module
MGD-32	Graphic Annunciator Driver Module
RTI-1	Remote Trouble Indicator, Buzzer and LED
<b>Enclosures for Remote Annunciators</b>	
MMX-BB-1001DR	Remote enclosure, red door. Houses 1 module.
MMX-BB-1002DR	Remote enclosure, red door. Houses 2 modules.
MMX-BB-1003DR	Remote enclosure, red door. Houses 3 modules.
MMX-BB-1008DR	Remote enclosure, red door. Houses 8 modules.
MMX-BB-10012DR	Remote enclosure, red door. Houses 12 modules.
<b>Other Items</b>	
INX-10A	Intelligent NAC Expander Panel
MMX-BC-160R	External Battery Cabinet
MR-2312-SR12	Smart Relay Module with Red Enclosure. Can support up to 12 relays.
MP-3500R	Solenoid EOL Module (Red) - 47K.
MP-300R	End of Line Plate, Red.

**Note:** For releasing application please see the Releasing Guide LT-1091SEC