

# Model 54R

## Retrofitting Option for non-Ludlum Article Monitors



Ludlum Measurements, Inc.

### Features

- QPASS Counting Technology for Shorter Counting Cycles
- 20.3 cm (8 in.) Color LCD with Touch Screen Interface
- USB Port for Printer-Free Operation & Calibration
- User-Selectable Operating Modes
- Auto Calibration Routine



above: display screen

Electronics Only: Part Number 4540-823

With Detectors for BWM-10: Part Number 4540-993

### Introduction

Small Article Monitors tend to be larger-sized instruments with multiple sensitive plastic scintillator detectors, case-mounted electronics, and a chamber lined with cumbersome, heavy lead shielding. When the monitor's detectors reach the end of their useful life, the monitor is no longer supported by the original manufacturer, or an upgraded performance is desired, it can be difficult to make the decision to act because of these factors. Ludlum Measurements has responded to customers' requests for a way to enhance performance with comparative ease.

The Model 54R is a set of electronics designed to retrofit on existing Eberline BWM-10 article monitors, for example, and give them the same operational performance and features as the Ludlum Model 54 system. The Model 54 Small Article Monitor, (part number 48-3263) has been in service for years and is a benchmark in the industry. Now the Model 54R can enable other article monitors, such as the Thermo SAM family or Canberra's products, to be retrofit to that standard. Retrofitting allows the heavy instrument to remain in its former location with less disruption while other work continues. The chassis is designed to replace the existing electronics with little or no modifications to the existing monitor. It can work with existing detectors or Ludlum can provide replacement detectors to raise the sensitivity of the instrument to the level of a new instrument.

### Specifications

**DETECTORS:** can use existing detectors or replacement detectors are available

#### ELECTRONICS:

- PC based, fanless controller motherboard running Embedded Windows™ XP
- Display: 20.3 cm (8 in.) (diagonal) TFT LCD, SVGA, touchscreen
- User Pushbutton Controls: Start/Stop Count, Background Update, Alarm Acknowledgement. All other control functions are available via the LCD touch screen. Password protection employed.

**I/O:** Alarm & access control relays, USB ports, TCP/IP

#### COUNTING:

- Three alarm modes to maximize throughput, sensitivity or fix the count time
- Alarms available for sum channels, sum zones and individual detectors
- Automatic background updating
- Contaminated detector checking
- False alarm control
- Logs each use, operational test, and calibration

**TEMPERATURE RANGE:** 0–50 °C (32–122 °F)

**MAXIMUM HUMIDITY:** 95% non-condensing

**POWER:** 100–240 Vac, 50–60 Hz single phase

**Option: Status Signal Lights:** high-visibility, pole-mount column of status indicators with red, yellow, and green lights (Part Number 4540-209)

sample screen shots shown

