# Model 54R & Model 54R-11
## Retrofitting Option for non-Ludlum Article Monitors

**Ludlum Measurements, Inc.**

**Model 54R** (left)
Electronics Only: P/N 4540-823
With Detectors for BWM-10:
  P/N 4540-993

**Model 54R-11** (right)
P/N 48-4212-11

## 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

## Introduction

Small article monitors tend to be large, cumbersome instruments with multiple sensitive plastic scintillator detectors, case-mounted electronics, and heavy lead shielding. These characteristics tend to make them difficult to update when upgraded performance is desired or the monitor is no longer supported by the original manufacturer. However, Ludlum Measurements offers an option to update a small article monitor with comparative ease.

The Model 54R Series is a set of electronics designed to retrofit existing small article monitors, giving them the same operational performance and features as the Ludlum Model 54 small article monitor. The Model 54R is designed to retrofit Eberline BWM-10 monitors, and the Model 54R-11 is designed to retrofit Thermo SAM11 monitors. 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 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

**Model 54R:** for Eberline BWM-10. Electronics only: P/N 4540-823. With detectors: P/N 4540-993.
**Model 54R-11:** for Thermo SAM11, P/N 48-4212-11.

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

**Sample Screen Shots**

Note: specifications subject to change without notification. We are not responsible for errors or omissions.