

## Digital Area Monitor

Available in mR/hr or  $\mu$ Sv/hr



### Features:

- Affordable Area Monitor
- $1\mu\text{Sv/h}$  to  $10\text{ mSv/h}$  ( $0.1\text{ mR/hr}$  to  $1\text{ R/hr}$ )
- Integrated Design
- Battery Backup
- Networkable
- Audio & Visual Alarms

Designed for visibility and ease of use. This monitor incorporates an internally housed energy compensated GM detector with a range from  $1\mu\text{Sv/h}$  to  $10\text{ mSv/h}$  ( $0.1\text{ mR/hr}$  to  $1\text{ R/hr}$ ). It features a wall-mount chassis and a four-digit LED display that is readable from 9 meters (30 ft) away. Backlit indicators warn of low radiation (yellow), high radiation (red), instrument failure (red), and low battery (yellow), along with an alarm. A green status light is a positive indication of instrument operation.

Parameters are protected under a calibration cover. Calibration is easily accomplished by moving the cal dipswitch to the right, and using the pushbuttons to increment or decrement the calibration constant, dead time correction, and alarm point parameters. Parameters are stored in non-volatile memory (retained even with power disconnected). A five-decade logarithmic analog output is provided. A battery backup provides 48 hours of additional use after the primary power is removed.

### Specifications:

Application: Gamma monitoring  
 Detector: Energy compensated GM  
 Operating Range:  $1\mu\text{Sv/h}$  to  $10\text{ mSv/h}$  ( $0.1\text{ mR/hr}$  to  $1\text{ R/hr}$ )  
 Display: 4-digit LED display with 2 cm character height  
 Display Range: 000.0- 9999 (Series One: 00.00 to 9999)  
 Display Units:  $\mu\text{R/hr}$ ,  $\text{mR/hr}$ ,  $\text{R/hr}$ ,  $\mu\text{Sv/h}$ ,  $\text{mSv/h}$ ,  $\text{Sv/h}$ ,  $\mu\text{rem/hr}$ ,  $\text{mrem/hr}$ ,  $\text{rem/hr}$ ,  $\text{cpm}$ ,  $\text{cps}$ , and others  
 Linearity: Reading within  $\pm 10\%$  of true value with detector connected

Response: Typically three seconds (10%- 90% of final reading)  
 Instrument Status: **Green Light** instrument functioning properly  
 Low Alarm: **Yellow Light** and Slow Beep (one per second) audible tone (can be set at any point from 0.0- 9999)  
 High Alarm: **Red Light** and fast beep (4 per second) audible tone (can be set at any point from 0.0- 9999)  
 Low Battery: **Yellow Light** indicates less than two hours of battery power remaining  
 Overload: Senses detector saturation (indicated by display reading "- OL -")  
 Overrange: Indicates radiation field being measured has exceeded counting range of instrument  
 Calibration Controls: Accessible from front of instrument (protective cover provided)  
 High Voltage: User-adjustable from 450- 2500 volts  
 Dead Time: User-adjustable to compensate for dead time of detector and electronics (can be read on display)  
 Audio: Can vary from approximately 68 dB through operation of the external rotary baffle and the internal voltage connection  
 RS-232 Output: A 2-second dump for computer data logging  
 Remote Display: Optional relay output available for connecting remote displays  
 Ethernet: Optional 10 Base-T connection for use with Ludlum Model 375 software  
 Temperature Range:  $-15$  to  $50^\circ\text{ C}$  ( $5$ - $122^\circ\text{ F}$ ) May be certified for operation from  $-40$  to  $65^\circ\text{ C}$  ( $-40$  to  $150^\circ\text{ F}$ )  
 Power: 9 Vdc wall-mount adapter with four sets of prongs for almost any style wall receptacle  
 Battery Life: 48 hours in non-alarm condition (typical)  
 Battery Life: 12 hours in alarm condition (typical)  
 Battery Charger: Battery is continuously trickle charged when instrument is continuously connected to line power and turned on  
 Construction: Aluminum housing with ivory powder coat finish  
 Dimensions: 7.4" H x 9.7" W x 2.5" D  
 Weight: 4.7 lb

051-275 Digital Area Monitor, 90-260 Vdc  
 Includes: Built-in GM Gamma Detector  
 Display is in mR/hr

051-273 Digital Area Monitor, 90-260 Vdc  
 Includes: Built-in GM Gamma Detector  
 Display is in  $\mu\text{Sv/hr}$