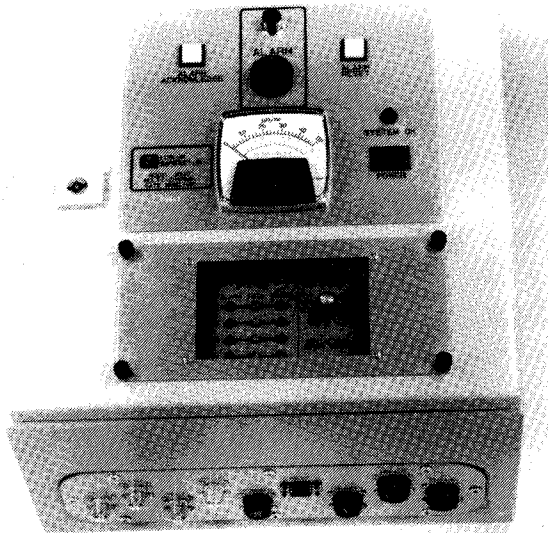


NEW AREA/PORTAL MONITOR *September 1991*



The M3500 series of instruments is Ludlum's newest line of instrumentation. The M3500 is a very sensitive multi-detector system which can monitor an area, conveyor, portal, or gate. The system is microprocessor-based, and provides automatic background compensation, automatic alarm point setting and a latched alarm. The monitor is very easy to use, having only power on/off, alarm acknowledge, and alarm reset buttons. The alarm setpoint switch in the recessed panel controls system sensitivity by setting the alarm point from 1 to 6 deviations above background. The system runs continuous diagnostics, and warns if either high background conditions exist, or if no counts are received from any detector.

Up to four detectors can be attached, and each has a separate high voltage power supply. The detectors can be either sodium iodide (NaI) crystal scintillators, or plastic scintillators. Detectors can be placed up to 1000 ft. away from the monitor. Sensitivity of the system depends upon the detectors, with two 3" NaI shielded detectors, the system can reliably see 2.5 μ R/hr from 2.5 ft. moving at 1 mph.

The M3500 has recorder output on all channels, RS-232 digital alarm output, and either 110 VAC or 12 VDC alarm output. An infrared transmitter and receiver, if attached, can allow the M3500 to monitor for an alarm only when the beam is blocked. The infrared transmitter and receiver can decrease the number of false alarms received. Other accessories include a small 40-column RS-232 printer and a 110 VAC beacon.

M3500 SPECIFICATIONS

SIZE: 14.96" X 14.96" X 8.27"(Depth)

WEIGHT: 24.75 lbs.

INPUT POWER: 115 volts, 50-60 Hz.

TEMPERATURE RANGE: 0°F - 140°F.

ALARMS: Visual and audio alarms with optional remote alarms.

DISPLAY: 0 - 25 μ R/hr meter range displays average background reading.

METER OVERRIDE: Displays individual detectors's high voltage, background, count in, and alarm point setting.

CALIBRATION MODE: Special mode allows for easy calibration.

DETECTORS: Number of probes required will depend on application.

Scintillation detectors housed in a NEMA 4 enclosure.

LMI TIPS: SURVEY METERS AND DETECTORS *September 1991*

A common inquiry that we receive is the use of our survey meters and scintillation detectors with combination meter scales. The combination meter dial (counts per minute (cpm) and mR/hr) was designed so that a G-M detector could be read in cpm and mR/hr simultaneously.

Another benefit of the combination scale is the advantage of using multiple detectors with one survey meter. For example, one can survey with a G-M detector and read a pure gamma field in mR/hr or switch to a scintillation detector and read in cpm. However, due to the sensitivity contrast in different type detectors an error occurs when the scintillation detector is read in mR/hr instead of micro R/hr (μ R/hr). This will result in an erroneous or improper reading. If readings are required to be done in μ R/hr, special combination scales are available if required although some modifications to the survey meter may be necessary.

To determine if you have the correct combination meter face dial for you survey meter and detector the following conversion chart may be helpful. Please call our Customer Service Department if you have any questions.

DETECTOR	CONVERSION	METER FACE DIAL
LMI M44-6, 44-38	1200 cpm/mR/hr for Cs-137	202-241
LMI MODEL 44-7	2100 cpm/mR/hr for Cs-137	202-330
LMI MODEL 44-9	3000 cpm/mR/hr for Cs-137	202-560
LMI MODEL 44-2	200,000 cpm/mR/hr for Cs-137	202-346
LMI MODEL 44-3	675,000 cpm/mR/hr for I-125	202-212