

## Surface / Waste Contamination Monitor



- Excellent Surface Contamination Screening Tool for:
  - Small articles
  - Baggage
  - Packages
  - Medical Waste
- Affordable Digital Controller
- Dual Large Plastic Scintillator Detectors
- Programmable Alarms
- Networkable
- Battery Backup



- The Model 375P-336 is a Digital Model 375 Controller coupled to two 2753 cm<sup>3</sup> (168 in<sup>3</sup>) plastic scintillation detectors
- These components are indoor units that are typically wall-mounted
- This simple and cost-effective solution offers a system that is easy to operate and maintain
- The controller supplies local alarms, but can also be connected to external alarms or even put onto an Ethernet network if desired
- It additionally has a 24-hour battery backup to keep the system operational in the event power is lost

**Medical Application:** This instrument is ideal for monitoring personnel or laundry for possible contamination in the nuclear medicine department. The monitor may also be used as a radiation contamination triage device to alert emergency department personnel of potentially contaminated patients or equipment coming into the emergency room.

**Surface Contamination Inspection:** Inspecting items using hand held instruments can be too time consuming in many cases. The Model 375P-336 allows a more rapid and uniform inspection by placing two relatively large sized scintillation detectors in close proximity to the incoming or outgoing articles undergoing inspection. Both detectors are continuously monitored by the digital controller so any offending item can immediately trigger an alarm. Alarm conditions can be set up to automatically halt production conveyance devices, notify the central office and even alert key personnel to initiate an immediate response.

### Specifications:

**Detector:** 2 ea. 2753 cm<sup>3</sup> (168 in<sup>3</sup>) plastic scintillation detectors  
Each detector is supplied with a 15.2m (50 ft) coaxial cable

**Display:** 4-digit LED display with 2 cm (0.8 in.) digits

**Display Units:** Can be made to display in uR/hr, mR/hr, R/hr, uSv/h, mSv/h, Sv/h, cpm, cps, and others

**Range:** 0.0 to 9999 kcps

**Linearity:** Reading within 10% of true value

**Response:** Typically 3 seconds from 10% to 90% of final reading

**Status:** **Green Light**, instrument functionally properly

**Sigma Alarm:** **Red ALARM** light and adjustable audible tone  
(can be set at any point from 0.0 to 999 sigma)

**Sum Alarm:** (for 2 detector system) indicated by **Red ALARM** light and audible tone

(can be set at any point from 0.0 to 9999 kcps)

**DET Fail:** **Red Light** and audible tone: greater than 68 dB at 61 cm (2 ft) indicates no counts from detector or instrument failure

**Low BAT:** **Yellow Light** indicates less than 2 hours of battery power remaining (when AC power is off)

**Overrange:** Indicates measured radiation field has exceeded counting range of instrument  
(indicated by display reading "--")

**Relay Output:** Mains (120 or 240 Vac) output on alarm, 9-pin connector providing RS-232 output, signal ground connection, FAIL and ALARM signals (current sink) and direct connection to battery and ground

**Calibration Controls:** Accessible from front of instrument  
(protective cover provided)

**Temperature Range:** 5° to 122 °F

**Power:** 95-135 Vac (178-240 Vac available), 50-60 Hz,  
6 V sealed lead-acid rechargeable battery (built-in)

**Battery Life:** Typically 24 hours in non-alarm condition

**Battery Charger:** Battery is continuously trickle-charged when connected to line power and turned on

**Construction:** Aluminum housing with ivory powder-coat

**Size:** Electronics: 10.3" H x 9.7" W x 3.3" L

Detectors (ea): 41" H x 6.75" W x 2.125" L

**Weight:** Electronics: 9.3 lb

Detectors (ea) 23.5 lb

375P-336 Surface/Waste Monitor  
N21R-LED Horn/ Strobe LED Light  
APC-336 Aluminum Protection for Detector