

# PORTABLE BETA-GAMMA HAND, SHOE, BODY MONITOR

Model ~ HSM-P-20

## FEATURES:

- PORTABLE
- DETECTS BETA, GAMMA
- DIGITAL DUAL DISPLAY
- 2 SEPARATE SCALE FACTORS FOR RATE & TOTAL
- 0.1-99 sec TIME CONSTANT FOR RATEMETER
- 8 DIGIT LCD DISPLAY
- ALARM - AUDIO/VISUAL
- BATTERY POWER; **OPTIONAL:** RECHARGEABLE BATTERIES
- TWO DETECTORS (4 TOTAL SENSORS)
  - ONE HAND & CLOTHING P-15/2 GM SENSOR WITH HANDLE
  - ONE FOOT PROBE WITH (2) T-1190 GM PANCAKE SENSORS
- RUGGED WHEELED CASE WITH EXTENSION HANDLE
- **OPTIONAL:** ALPHA
- USB PORT - **OPTIONAL:** RS-232 SERIAL PORT
- **CE MARK; IP64**



PRS-2S  
ELECTRONICS



HAND & BODY DETECTOR  
(2) T-1190 SENSORS



SHOE DETECTOR  
(2) T-1190 SENSORS



HAND & SHOE & BODY SYSTEM  
CASE

## APPLICATION:

The **HSM-P-20** is a lightweight portable shoe, hand & clothing detectors perfect for field use. It uses the PRS-2 electronics used as both a Digital Ratemeter / Scaler.

- Battery operated.

## DESCRIPTION:

The **PRS-2** is a multi-purpose lightweight Scaler with internal replaceable battery.

- Includes a digital ratemeter operating mode presenting 6 full decades of accurate readout without switching.
- The **PRS-2** is a sturdy portable instrument incorporating both scaler and ratemeter functions.
- Gate time for the scaler is free running mode.
- Readings directly in mR/hr or other units can be made by choosing correct scaling factors for electronics and material being monitored.



**TECHNICAL ASSOCIATES**  
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## SPECIFICATIONS HSM-P-20

**Detector:** (2) T-1190 GM Pancake sensors in hand and clothing detector.  
(2) T-1190 GM Pancake sensors in foot detector.  
Quick Disconnect  
Detector Bias Supply: 900 V DC regulated and filtered - other voltage levels-optional.

## SPECIFICATIONS PRS-2S:

### Electronics – PRS-2S

- DUAL DISPLAY
  - Reads out from 2 separate probes simultaneously
- 2 SEPARATE SCALE FACTORS FOR RATE & TOTAL
- HIGH VOLTAGE 400V-1200V DC
- 0.1-99 sec TIME CONSTANT FOR RATEMETER
- 8 DIGIT LCD DISPLAY
- ALARM - AUDIO/VISUAL
- USB PORT
- CE MARK
- IP64

**Power:** Batteries: 6 AA cells or optional in-place rechargeable batteries.

**Battery Life:** 100 hours with Alkaline cells (200 hours with - Lithium cells).

**Construction:** All plug-in circuit cards, essentially no wires. Rugged, lightweight.

**Temperature:** -10 C° to 40° C

### Dimensions & Weight:

- **Electronics:** 3.25" D x 4.25 W x 7.25" H.  
**Weight:** 2 lbs
  - **Foot Detector:** 14" L x 4" W x 7" H  
**Weight:** 15 lbs
  - **Hand & Body Detector:** 6" L x 3.5" W x 1" H (No Handle)  
17.5" L x 3.50" W x 1" H (With Detachable Handle)  
**Weight:** 2 lbs
  - **Carrying Case:** 20 lbs; Wheeled with Extension Handle (LGPEL-W)
- Total Weight:** 43 lbs.



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**Electronic Options:** RS-232 serial port  
Alpha, Beta, Gamma Detectors  
Rechargeable Batteries & AC Charger

Digital Display	RATEMETER	SCALER
Range	6 digit LCD	8 digit LCD
User Settable; Scale Factor	0.1 - 20,000 count/sec	•0-10,000,000; Total counts
Time Constant	0.01 to 99 seconds Display Refresh Rate	Free Running

## HSM SERIES ~ HAND, SHOE & CLOTHING MONITOR COMPARISON

MODEL	DETECTION	DETECTOR TYPE	EXTERNAL CLOTHING PROBE
HSM-10A	BETA / GAMMA	THIN SIDE WALL GM (4) GM T-1100 Per hand; (2) GM T-1200 Per foot  TOTAL (8) OPTIONAL (1) each additional GM T-1200 for each foot TOTAL (12)	YES TA – P15; GM T-1190
HSM-10B	ALPHA, BETA, GAMMA	THIN WINDOW PANCAKE GM T-1190 (4) Per hand (2) Per foot TOTAL (12)	YES TA – P15; GM T-1190
HSM-10ABS	SEPARATE & SIMULTANEOUS ALPHA & BETA	SCINTILLATION  Dual phosphor ZnS Alpha and plastic Beta/Gamma scintillation detectors. (2) Per hand; (2) Per foot. TOTAL (8)	YES TA – P15; GM T-1190
HSM-10G	SEPARATE & SIMULTANEOUS ALPHA & BETA	GAS FLOW PROPORTIONAL  10-3/4" x 6-1/4" each side – (2) Per hand detectors. 16-1/4" x 6-1/4" each shoe – (1) Per shoe. TOTAL (6)	NO
HSM-10AS (HAND & CLOTHING ONLY)	ALPHA	ALPHA SCINTILLATION  ZnS(Ag (2) Per hand. TOTAL (4)	YES TA PAS-8 – ZnS(Ag)
HSM-P-20 (Portable HAND, FOOT & CLOTHING)	BETA / GAMMA OPTIONAL - ALPHA	THIN WINDOW PANCAKE GM T-1190  (2) Portable Hand / Clothing Detector (2) Portable Shoe Detector. TOTAL (4)	YES TA P-15 GM T-1190



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