

# HP-380 Series

## Hand Probe



### FEATURES

- Alpha & Beta Detectors
- Alpha /Beta Discrimination
- 100 cm<sup>2</sup> Active Detector Area
- Light Weight, Rugged Design
- Ergonomic Design

The HP-380 series Hand Probes are general purpose survey and frisking probe with excellent sensitivity to alpha and beta with minimum interference from gamma backgrounds. The large 100 cm<sup>2</sup> active area allows rapid surveying and direct correlation to industry standards.

Three models are available which include:

- Model HP-380A , alpha detection
- Model HP-380B, beta detection
- Model HP-380AB, alpha & beta detection

The detection elements include ZnS(Ag) for alpha and plastic scintillator for beta. The HP-380AB utilizes a dual phosphor element with excellent discrimination capability between alpha and betas.

The detector face is protected by a fine mesh, stainless steel screen to guard against punctures. The probe design is constructed from light weight aluminum which promotes ruggedness and ergonomic handling.

This detector is also available as a "Smart" probe which includes a memory device to store all calibration and functional parameters for smart instruments like the FH 40 G Family of advanced survey meters.

### SPECIFICATIONS

Application:	Alpha/Beta surveys, frisking
Detector Type:	Dual Phosphor scintillator
Scintillator:	Alpha: ZnS(Ag) Beta: NE102 Plastic
Operating Voltage:	600 V nominal
Temperature Range	-400 to +1400 F (-400 to 600 C)
Housing:	Cast aluminum body

Window Area:	2.72" x 5.7" (11.4 in <sup>2</sup> ) 6.9 x 14.5 (100 cm <sup>2</sup> )
Window Thickness:	3 layers of 0.29 mg/cm <sup>2</sup> (0.87 mg/cm <sup>2</sup> total)
Gamma Sensitivity:	< 12,000 cpm/mR/h (137Cs, in the alpha/beta window) < 1.0 cpm/mR/h (137Cs, in the alpha window)
Size:	11.25" long x 2.75" wide x 3.25" high (28.6 cm x 7 cm x 8.3 cm)
Weight:	1.37 lbs. (0.59 kg)
Connector:	MHV (Smart probes use the Thermo Smart Connector)

Efficiency (4pi)	HP-380A (Alpha Only)	HP-380B (Beta Only)	HP-380AB (Alpha & Beta)
<sup>90</sup> Si <sup>90</sup> Y		26%	22%
<sup>99</sup> Tc		14%	9%
<sup>239</sup> Pu	21%		18%

### OPTIONS

- Smart Probe: Order Model SHP-380A for alpha
- SHP-380B for beta
- SHP-380AB for alpha/beta
- Smart Probe Conversion: Order SMARTPACMHV

