

GMP-25

External Beta Probe



The **GMP-25** external probe enhances the detection capability of RADOS RDS-31 meter family. It has been designed to fulfill the most demanding applications in the nuclear industry, security and industrial use. The GMP-25 is intended for monitoring alpha, beta, gamma and X-ray radiation. The GMP-25 is used as an external detector with the RDS-31/iTx/iTxSD multi-purpose meters, especially for surface contamination monitoring and source localization applications. The GMP-25 probe is equipped with a Binder connector and connected to the mating bulk connector interface at the bottom of RDS-31 family survey meters.

Like other RADOS external probes, the GMP-25 is a "smart" probe, having an internal high voltage generator and non-volatile memory for calibration coefficients and probe identification data. Thus the probe can be connected "on-the-fly" without the need for powering down. The instrument automatically recognizes the probe type and sets the meter reading to the pre-defined measuring unit. Whenever an external detector is connected to the RDS-31, the meter continues to perform dose rate measurements with the internal detector to ensure the user safety.

SPECIFICATIONS

- radiation detected: gamma-, beta- and alpha-rays
- energy range: gamma > 6 keV, betaEmax > 100 keV, and alpha > 2 MeV
- detector type: GM tube 7313
- pulse rate range: 0 - 50 000 cps
- mica window with active area: 15.5 cm² (6.1 in²); window thickness: 1.5 - 2 mg/cm²
- sensitivity: 2.8 cps (170cpm) for 90Sr/90Y uniform source of 0.37 Bq/cm²
- equipped with retractable cord, length 2000 mm (78.74 in)
- temperature range: operation: -25°C to +55°C (-13°F to +131°F); storage: -40°C to +70°C (-40°F to +158°F)
- humidity: 0 - 95% relative humidity, non-condensing
- Casing of durable ABS/polycarbonate, length 330 mm (13 in), width 70 mm (2.75 in)
- weight: 490 g (1.08 lb)

FEATURES

- remote pulse rate measurements
- for alpha /beta/gamma surface contamination measurements
- converts the meter into contamination monitor
- sensitive for low levels of alpha, beta and gamma radiation
- for general contamination and frisking
- cord lengths up to 15 meters upon request

The GMP-25 probe is equipped with a Binder connector and connected to the mating bulk connector interface at the bottom of RDS-31 family survey meters. Other version with IKELITE 7 bulk connector and a separate straight cable (various lengths) is available upon request.

GMP-25 MDA

Parameter/Settings	Self Count Rate	BG	Sensitivity	Meas. Time
	30 cpm	0.1 μSv/h	300 cpm / μSv/h	tb = 60 s ; ts = 60 s
detectors : GM Tube	source to grid separation 1 cm; Grid open area to surface = 71%			
	efficiency (cps / Bq)		MDA	
Am-241, α	Am-241, α		Am-241, α	
C-14 β,	C-14 β,		C-14 β,	
Emean: 50 KeV	Emean: 50 KeV		Emean: 50 KeV	
> 7 ± 1% < ~ 0,55 Bq/cm ²	> 7 ± 1% < ~ 0,55 Bq/cm ²		> 7 ± 1% < ~ 0,55 Bq/cm ²	

