

# SI-GAM



## **Gamma Smart Probes**

**Environment / Low flow / Medium flow / High flow**

- Measurement of the Gamma and X ray dose equivalent rate
- Compatible with a monitoring station for risk prevention / network equipment monitoring
- Remote measurement up to several tens of meters
- Can be connected to Carmelec beacons (SAG-A and Cerbere)
- Compact and sturdy
- Easy decontamination

Review date: 16th April 2019



## Technical characteristics

	SI-GAM - EV	SI-GAM - BF	SI-GAM - MF	SI-GAM - HF
Configuration	Environment	Low flow	Medium	High flow
Detector type	Energy compensated GM	Energy compensated GM	Energy compensated GM	Energy compensated GM
Measured radiation	$\gamma, X$	$\gamma, X$	$\gamma, X$	$\gamma, X$
Measured range	H*(10)	H*(10)	H*(10)	H*(10)
Typical sensitivity to <sup>137</sup> Cs		1.3 cps / $\mu$ Sv/h	0.55 cps / $\mu$ Sv/h	0.030 cps / $\mu$ Sv/h
Typical sensitivity to <sup>60</sup> Co		1.8 cps / $\mu$ Sv/h	0.75 cps / $\mu$ Sv/h	0.034 cps / $\mu$ Sv/h
Dose rate range	0.05 $\mu$ Sv/h to 10 $\mu$ Sv/h	0.5 $\mu$ Sv/h to 9.99 mSv/h	10 $\mu$ Sv/h to 99.9 mSv/h	500 $\mu$ Sv/h to 9.99 Sv/h
Energy range		50 keV to 1.25 MeV	60 keV to 1.5 MeV	80 keV to 1.5 MeV
Weight (without cord)	200 g	110 g	90 g	80 g
Dimensions	$\phi$ 30 x 240 mm	$\phi$ 30 x 150 mm	$\phi$ 30 x 150 mm	$\phi$ 30 x 120 mm
Standards		EC, IEC 60532		EC
Operating temperature		- 20 °C to / 50 °C		
Relative humidity		up to 95% at 38 °C		
IP code		IP67		
Power supply	Provided either by the beacon or the external network – ELV of + 5 to 24 VDC (@ 5mA at + 5 VDC in ambient)			
Display	Provided either by the beacon or the surveillance			
Alarm levels	Programmable			
Housing material	AU4G Aluminium			
Cleaning	Housing is easily decontaminated			
Connecting cord	Detachable from 1.5 to 20 m as standard (longer lengths upon request)			
Software	PCT - PRC set up kit			
Applications	Hot spot search, zoning inspection, environmental measurement, supervision			
Communication	Modbus protocol- RS-485 signal			

## Application & Use

SI-GAM probes allow for ambient dose rate measurement. They may be used either for hot spot search, zoning inspection or environment measurement. Their Modbus communication on a RS-485 network makes them easy to supervise. Several probes may be connected to the same network.

## Options

PCT-PRC\* periodic inspection kit (inspection date update and configuration). Can be connected to Carmelec beacons (SAG-A and Cerbere).



\*PCT-PRC: Periodic Compliance Test/ Periodic Regulatory Calibration