

GI1 Ion Chamber Detector

Operates in pulsed fields

The GI1 Ion Chamber detector is a sealed ion chamber probe packaged in a cylindrical aluminum enclosure and fitted with a multi-pin circular connector for interconnection to an Apantec RM1 series display unit. The GI1 is used on area monitoring applications with transient or burst radiation levels, or those channels with anticipated high activity such as containment / post accident detection.

The GI1 includes a current-to-frequency converter for converting the current output signal from the ion chamber sensor into pulses suitable for counting by the RM1 series display unit input circuitry. The RM1 display and control unit provides Ethernet and serial RS485 communications for networking to a central computer using the Apantec DORIS software.

The GI1 measures a range of 100 uR/hr to 100 R/hr.

The GI1 is also available with an internal isotopic check source. These instruments are designated as the models GI1C.

For high range and high TID applications, please refer to the Apantec model CIC1 Ion Chamber detector design.

Multiple probe configurations



Specifications

Detector Type: Ion chamber, sealed Range: 100 uR/hr to 100 R/hr

Energy Response:

±20% from 80 keV to 2.5 MeV

Referenced to ₁₃₇Cs

Saturation:

will not saturate in fields up to 1,000

R/hr

Accuracy: ±20% over entire range

Environment: 14°F to 122°F

(-10°C to 50°C)

0-95% RH

Operating Voltage:

+12 VDC

Biasing voltages internally generated

Dimensions:

12.5 in. (317.5 mm) L x

2.5 in. (63.5 mm) dia.

Weight: 3 lb (1.35 kg) nominal