

# Tolteq iSeries Ruggedized Gamma Module (iRGM)

The Tolteq™ iSeries ruggedized gamma module (iRGM) offers extreme resistance to shock and vibration, utilizing a patent-pending floating gamma chamber to isolate fragile components from harsh external forces. The module, which integrates with Tool Tracker™ for extensive data analysis, also possesses its own processor to enable individual logging of parameters such as temperature, vibration, shock, voltage, current, and gamma count. Extensive built-in logging capabilities, high-temperature compensation, and flexibility to use in a variety of toolstrings assures applicability and reliable performance across various project types.



## Features and Benefits

- Rated to an industry-leading 45 G RMS for vibration exposure
- Ruggedized high-temperature gamma features a patent-pending isolated sensor chamber
- Revolutionary snubber designed to dramatically minimize potentially damaging conditions
- On-board logging of temperature, vibration, shock, voltage, current, and gamma count
- Temperature drift adjusted in firmware for more accurate gamma measurements
- Logs gamma independently of MCU, ensuring failsafe redundancy
- Download and view environmental and tool performance data with Tool Tracker
- Interfaces seamlessly with Tensor-style MWD tools to protect your investment
- Unique gamma scale factor is loaded into firmware
- Logs input pulse and flow for troubleshooting

## Electrical Specifications

Operating voltage range.....	20 to 30 VDC
Maximum input voltage.....	33 VDC
Operating current.....	10 to 25 mA
Output pulse.....	Neg (+5 V to 0 V)
Accuracy.....	±5% at 347°F (175°C)

## Mechanical Specifications

Diameter (OD).....	1.875 in. (47.6 mm)
Length (w/caps).....	51.57 in. (1.31 m)

## Environmental Specifications

Operating temperature range.....	32 to 347°F (0 to 175°C)
Survival temperature.....	-40 to 365°F (-40 to 185°C)
Maximum heat/cool range.....	3°C/minute
Vibration (3-axis) oper.....	45 g RMS, 15 to 500 Hz
Shock (z-axis).....	1,000 G, 0.5 mS
Shock (y-axis).....	1,000 G, 0.5 mS



Isolated gamma sensor

Internal logging board

Legacy-compatible sensor