

# 40TGU-1000 Triple Gamma Probe

## Description

Introducing the 40TGU-1000, the next generation of the well known 2GHF-1000 Triple Gamma probe for Uranium exploration and production. The 40TGU-1000 Triple Gamma features the latest electronics and is compatible with both the Scout Pro and Matrix data loggers. It measures natural gamma radiation from a Sodium Iodide scintillation crystal and a ZP1320 High-flux Geiger-Muller tube pair with anti-coincidence circuitry, resulting in three natural gamma logs being collected simultaneously.

The G-M tube pair, installed below the NaI detector, allows for the determination of ore grade in very high concentrations of  $U_3O_8$ . By having three different detector sensitivities, the 40TGU-1000 probe can be used in exploration and production projects with wide variations in ore grade. Accurate concentrations can be measured in uranium ore grades ranging from less than 0.1% to 20%.

## Features & Benefits

- Able to collect ore grade data in very high and low concentrations of uranium.
- Versatile, ubiquitous probe which functions with a wide range of applications and borehole conditions.
- Compatible with both Scout Pro and Matrix data loggers.
- Scout Pro and Matrix .sub files can be modified to output gamma in API units or %wt  $U_3O_8$  (percent weight Uranium).

## Applications

- Uranium Ore Grade Analysis
- Bed boundary analysis
- Coarsening/ Fining Sequences in mineralized zones
- Identify Clay Aquitards
- Formation Thickness

## Specifications

Diameter: 40 mm / 1.57"  
Length: 1.12 m / 44"  
Weight: 4.0 Kg / 8.8 lbs.  
Max. Temperature: 70°C / 158°F  
Max. Pressure: 200 bar / 2900 psi

Sensors: NaI Scintillation Crystal,  
2 Pairs of G-M Tubes

Measurement Range: 1 to 100,000 cps  
Accuracy:  $\pm 0.5\%$   
Resolution: 0.02% Full Scale

Average K-factors (0.24%  $U_3O_8$ ):  
NaI  $4.75 \times 10^{-6}$   
G1320  $1.1 \times 10^{-6}$

## Operating Conditions

Water, Mud, or Dry  
Uncased, PVC, and Steel  
Centralization: Not Necessary



*Specifications are subject to change without notice (November 15, 2023)*

