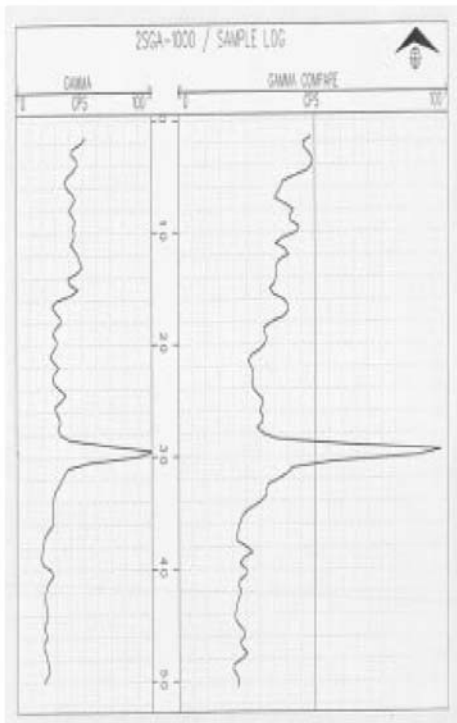


## 2SGA-1000 Ultra-Slim Natural Gamma Tool

At only 0.72" (18.2mm), the 2SGA-1000 ultra-slim Gamma can be used inside Geoprobe push-tubes to collect lithological information in soils, etc.. The Slim Gamma probe can be operated as a standalone probe on Matrix, or any other system capable of supplying the correct power and having borehole conditions within specifications.

The natural gamma measurement is made by the use of a Sodium Iodide crystal, which when struck by a gamma ray emits a pulse of light. This pulse of light is then amplified by a Photo multiplier tube, which outputs a current pulse. These pulses are then detected, shaped and transmitted up the cable line. The center of the Sodium Iodide crystal is approximately 16.58 inches, or 419.1 mm below probe top.



PMT Type R7400.

Alpha Spectra 76 mm  
x 13 mm diameter.  
NaI scintillation  
crystal.

### Specifications

#### Power Requirements

DC voltage: positive with respect to Armor at probe top.  
Min. 20 VDC, Max. 30 VDC @ 60mA nominal.

#### Tool Output

Positive pulse, 1 to 2uS wide, approx. 8v peak

#### Gamma Detector

NaI (tl) 36" dia x 3.0" long  
(9.14 mm x 76.2mm)

#### Gamma Detector location

16.5" from probe top.  
(419.1 mm)

#### Operating temperature range

14 to 120 deg. F  
-10 to 50 deg. C

#### Pressure rating

200 PSI  
137931 PASCAL

#### Dimensions

Length: 20.6 inches  
(523 cm)

Diameter .72 inches  
(1.82 cm)

Weight 10 oz  
(285 g)