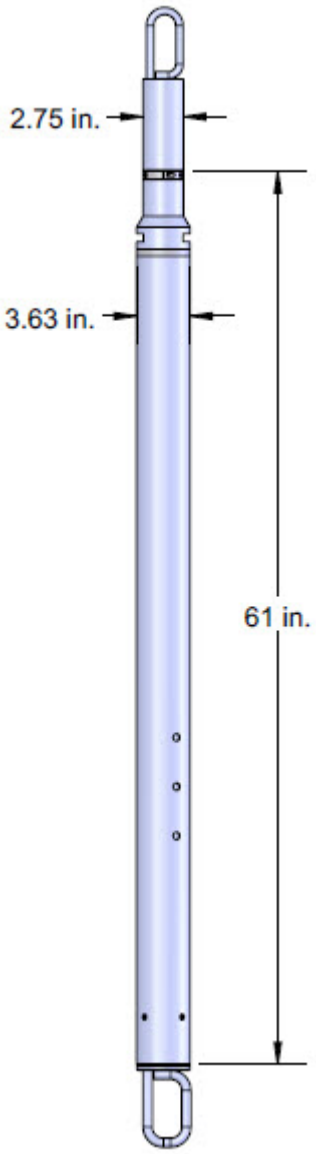
PICO TELEMTERY SPECTRAL GAMMA (PTSG)



DIMENSIONS AND RATINGS

Max Temp:	350°F (175°C)	Max Press:	20,000 psi
Max OD:	3.625 in. (9.2 cm)	Min Csg/Tbg ID:	4 in. (10.16 cm)
Length*:	5.08 ft (61 in)	Max Csg/Tbg OD:	20 in. (50.8)
Weight:	89 lb		

BOREHOLE CONDITIONS

Borehole Fluids: Salt ■ Fresh ■ Oil ■ Air ■
Recommended Maximum Logging Speed: 60 ft/min
Tool Positioning: Centralized ■ Eccentralized ■

HARDWARE CHARACTERISTICS

Sensor Type:	NaI
Sample Rate:	4 or 10 samples/ft
No. Channels:	256
Full Spectrum:	0 to 3 MeV

MEASUREMENT

Principle	Gamma-ray spectroscopy
Range	3 MeV
Vertical Resolution (90%)	18 – 36 in. (standard); 18 in. (enhanced)
Depth of Investigation (50%)	4 in. (90%: 11 in.)
Precision (1SD):	±5% or ±5 API, whichever is greater
Accuracy	± 5% API
Primary Curves	NGR, Uranium, Thorium, and Potassium concentrations
Secondary Curves	Fit Error, Stabilizer, Counts

CALIBRATION

Primary:	API gamma ray pit, K, U, Th, Test Tanks, Univ. of Houston
Secondary:	*Thorium verifier*
Wellsite Verifier:	Thorium verifier

PHYSICAL STRENGTHS*

Hardware	Tension	Compression	Torque
Tool Joints	*130,000 lb (59,000 Kg)*	*130,000 lb (59,000 Kg)*	*600 ft-lbs (850 n-m)*
Other	*75,000 lb (34,020 Kg)*	*75,000 lb (34,020 Kg)*	*na*

* *Strengths apply to new tools at 70°F (21°C) and 0 psi.*