

**2 1/2" Product Line**

**Telemetry / GR / CCL**

The Digital Telemetry instrument handles the communication between the surface system and digital downhole instruments in both directions. It also monitors the temperature of the telemetry electronics and the cable head voltage.

The tool includes a gamma ray scintillation detector, measuring the total gamma rays emitted by the surrounding formation. The Gamma Ray Log (GR) can be run in open and cased holes, in all mud systems and in dry holes. For cased-hole operations, a casing collar locator (CCL) is also part of the tool.

**Specifications**

Diameter:	63.5 mm (2.5")	GR	Nal scintillation crystal
Length:	1080 mm (42.5")	CCL	coil and magnet
Weight:	22 kg (48.5 lbs)		
Max. Temp: 175°C (350°F)		Measure Points (from bottom):	
Max. Pressure: 140 MPa (20 000 psi)		GR :	220 mm (8.7")
Top Connector: yes		CCL:	880 mm (34.6")
Bottom Connector: yes			

**Measuring Parameters**

<b>Measuring Range:</b>		<b>Accuracy*:</b>	
GR:	0 to 3000 gAPI	GR:	± 5 % of measured values*
CCL:	single casing string		

\* Gamma Ray measurements are radioactive measurements and hence subject to statistical variations. On a log, these variations between other factors depend on logging speed and filter strength.

**Logging parameters**

Recommended:		Recommended:	
Min. Hole Diameter:	100 mm (3.9")	Logging Speed GR:	9 m/min (1800 ft/hr)
Max.Hole Diameter:	NA	Sample Rate:	selectable
To be decentralized			
in hole sizes above:	305" (12.0")		
Min. Casind ID:	100mm (3.9")		

**Displayed Standard Curves**

GR in API	Gamma Ray
CCL in mV	Casing Collar Locator
CHV in V	Cable Head Voltage
TEMP in °C	Electronics Temperature

**Combinability**

With all 2 1/2" open hole instruments and 3 3/8" open hole instruments

