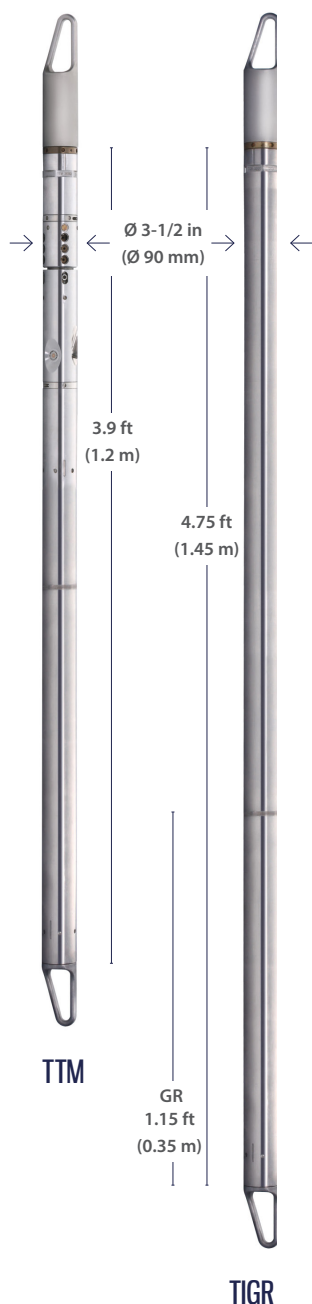




TELEMETRY / INCLINOMETER GAMMA RAY TOOL (TIGR) & TTM TOOL

GOWell's TIGR provides high-speed telemetry required to run all Gallop tools in combination. In addition to telemetry, TIGR also includes a natural gamma ray measurement, relative bearing, cable head tension, mud temperature and mud resistivity. Its functions are divided into two sections: the TGR and the TTM.



APPLICATIONS

- Shale Volume Calculation
- Wellbore fluid (mud) temperature
- Well to well geological correlation
- Wellbore fluid (mud) resistivity
- Instrument azimuth relative to the borehole (relative bearing)

FEATURES

- Combinable with Gallop tools
- High Uplink transmission rate
- TTM section includes temperature and resistivity sensors, tension and pressure balance piston
- Can be used in both Open Hole and Cased Hole conditions

SPECIFICATIONS

	TIGR & TTM					
GENERAL SPECS						
Maximum Pressure	20,000 PSI (140 MPa)					
Maximum Temperature	350°F (175°C)					
Maximum Hole Size	22.5 in (571.5 mm)					
Minimum Hole Size	4.5 in (121.9 mm)					
Diameter	3-1/2 in (90 mm)					
Length	TIGR: 4.75 ft (1.45 m) - TTM: 3.9 ft (1.2 m)					
Weight	TIGR: 58.4 lbs (26.5 kg) - TTM: 126 lbs (57.1 kg)					
Detector Type	Scintillation Detector					
Max. Logging Speed	33 ft/min (10 m/min)					
BOREHOLE CONDITIONS						
Borehole Fluids	Any					
Tool Position	Any					
HARDWARE FEATURES						
Voltage	220 Vac, 50 Hz					
Current	100 mA					
Sampling Rate	10, 20, 40 samples/m selectable					
MEASUREMENT	GR	DEVIATION	AZIMUTH	RELATIVE BEARING	MUD RESISTIVITY	MUD TEMP
Minimum	0 API	0°			0.01 Ω·m	32°F (0°C)
Maximum	2,000 API	90°	360°		50 Ω·m	350°F (175°C)
Accuracy	±3%	±0.5°	±1.5°		±5% (<5 Ω·m) ±10% (> 5Ω·m)	±(1°C + 1%)
Primary Curves	GR	DEV	AZI	RB	MRES	MTEMP