# Quantum XTool™ MWD Kit

### **High Speed Pulse**

XTool™ MWD Kit delivers up to 2 bps to surface, making it one of the fastest tools on the market. The pulse driver board and beefy driveline pair to deliver increased valve speed and superior precision control. The tool mates with Quantum Guidance directional sensor and Quantum Decoder surface system.

## 175°C Ruggedized

Our assembly is made to withstand temperatures of up to 175°C using premium electronic components for maximum temperature performance. We utilize ruggedized gamma detectors, custom centralization and accelerometers that help prevent failures in today's harsh drilling conditions.

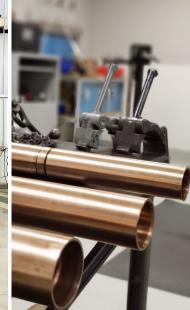
#### **Short Probe Configuration**

The probe assembly consists of electronics and battery(s). Typical set-up is an 11' probe – one battery with electronics – either with one centralizer or two configuration, resulting in a 15' collar length. The shorter package better isolates the tool and results in improved shock and vibration management. The efficient electronics allow for the one battery configuration in most well applications – intermediate or lateral.









# **Quantum Specifications**

	Quantum Pulse™	Quantum EM™
Temp Rating	347°F	347°F
Vibration (Shock)	20 g RMS, 15 to 500 Hz (1,000 g, 0.5 mS, half-sine)	30 g, 30 – 500 Hz, (1000g, 1/2 msec, 1/2 Sine Shock)
Max data rate (at 20k')	2 bps	32 bps
LCM tolerance	50lb/bbl published	60 lb/bbl+
Max Flow Rate (6.5")	750 GPM	800 GPM
Shock/Vibe	Yes	Yes
Rotational Values	Yes	Yes
Power Consumption	~3mA standby, ~100mA*sec/pulse @ 28V (~3.5 joules/pulse)	48 V (up to 300W)
Dogleg Rating Rotating 7"	18° / 100ft	18° / 100ft
Gap Sub Torsional Strength	N/A	35,000 lb-ft

