

**2 1/2" Product Line**

**Downhole Tension & Mud Data Sub**

The Downhole Tension and Mud Data Sub provide a series of information. It measures the tension and compression at the cable head and it records continuously the borehole temperature and mud resistivity.

The sub can be run as part of every tool string and is placed just below the cable head and above the digital telemetry. It can be logged in any kind of mud system.

Specifications				
Diameter:	63.5 mm	(2.5")	Sensors: Strain Gage Mud Resistivity Temperature	
Length:	1505 mm	(59.3")		
Weight:	24 kg	(90 lbs)		
Max. Temp:	175°C	(350°F)	Measure Points (from bottom):	
Max. Pressure:	140 MPa	(20 000 psi)		Tension: 968 mm (38.1")
Telemetry required:	yes			Mud Resistivity: 855 mm (33.7")
Top Connector:	yes		Temperature: 753 mm (29.7")	
Bottom Connector:	yes			

**Measuring Parameters:**

Measuring Range:

Tension:	± 90 kN (± 20 000 lbs) Max. Load (Push/Pull)
Temperature:	-5 to 180°C (23 to 356°F)
Mud Resistivity:	0.01 to 20 Ohmm

Accuracy:

Tension:	± 1 %
Temperature:	± 1 %
Mud Resistivity:	± 5 %

**Logging Parameters**

Recommended

Min. Hole Diameter:	100 mm (3.9")
Max. Hole Diameter:	NA

**Displayed Standard Curves**

CHT in kN or lbf	Cable Head Tension
BHT in °C/°F	Borehole Temperature
RMud in Ohmm	Mud Resistivity

**Combinability**

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

