

Microgauge

Small in Size— Big on Performance!

Scientific's mighty Microgauge is only 3/4 inches in diameter and 18 1/2 inches long. It has a sterling performance record in some of the world's most extreme high temperature/high pressure drilling environments. It has performed up to 45 hours non-stop in temperatures of 350°F and pressures up to 15,000 psi without a glitch. The Microgauge can be run in a carrier or stand alone on slickline.

Low Power Use— Long, Long Run Times

Scientific's Microgauge uses minimal power. It runs on a dual Lithium "AA" battery pack with a 1.4 Ah capacity. The tool goes into hibernation mode between samples when the rate is greater than five seconds per sample. Power consumption is only 11.5 mA when sampling and 1.67 mA when hibernating. This allows for five days of constant sampling at a one second sample rate. The gauge will operate for months downhole when a slower sampling schedule is programmed.

Scientific's Microgauge uses a universal serial bus (USB) interface (or serial port) to download its 32 megabytes of flash RAM. Its processor uploads four million pressure and temperature samples from the tool in ~five minutes. The minimum sample rate is one per second in one-second increments.

No On-Site Programming Required

Scientific's Microgauge can be pre-programmed off-site and run by simply installing a battery. No computer is needed on location to begin the job. It has a multiple job feature so that several jobs can be logged into memory without having to download previous job data. When the battery is removed after a job then reinstalled for the next job, a "software flag" is inserted between the data files separating the individual jobs. The Microgauge is a mighty midget that keeps on performing without interruption.

Technical Specifications	
Diameter:	0.75" (19 mm)
Length:	18.5" (479cm)
Sensor:	Piezoresistive
Pressure Ranges:	0-10,000 psi 0-15,000 psi
Maximum Pressure:	20,000 psi
Maximum Temperature:	350°F(175°C)
Minimum Sample Rate:	1 second
Sample Increments:	1 second
Maximum Samples:	4,000,000
Hibernation Sample Rate:	5 seconds
Resolution:	0.1 psi
Accuracy:	0.1 Full Scale
Power Consumption:	11.5 mA (Sample) 1.67 mA (Standby)

