

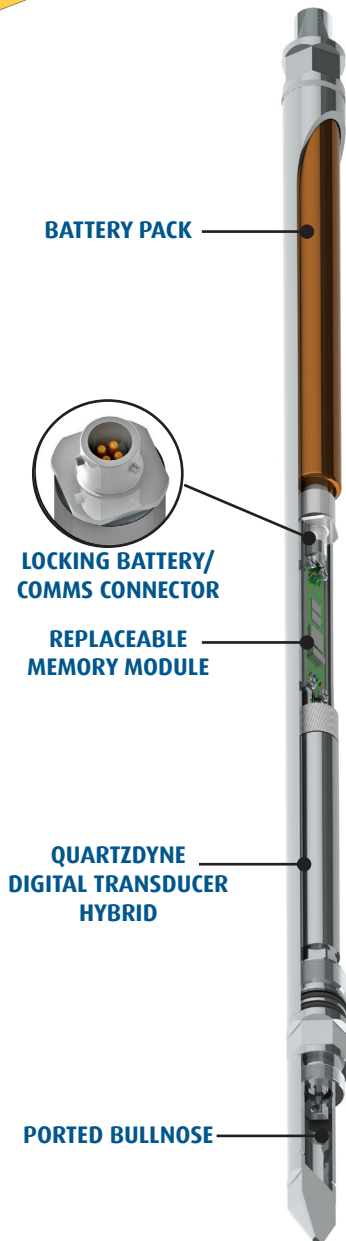


**Reservoir Group's flagship Quartz Memory Gauge QM200L delivers extreme accuracy in high pressure and temperature (HPHT) environments.**

The QM200L gauge provides exceptional data quality using Quartzdyne's state-of-the-art digital hybrid technology. A field replaceable 200°C memory module allows rapid change-out of the gauge's electronics providing virtually uninterrupted use of the gauge when required for multiple runs.

A large 1 million dataset memory module is supplied as standard, but a 2 million dataset memory module (max 185°C rated) is available as an option. Materials such as Hastelloy and Inconel are used in the manufacture of the QM200L to help combat corrosion effects associated with use in HPHT hostile wells.

At 1.25" OD and with a lockable Battery Pack, the rugged construction of the QM200L helps it to withstand higher levels of shock and vibration than other Quartz Gauges on the market, but is slim enough to be deployed in a spring-mounted Shock Housing if necessary.



Features	Benefits
High pressures and temperatures up to 25 ksi and 200°C	Superior performance in challenging environments such as HPHT
Field replacement memory modules	Provides the best reliability in any environment
Sequential memory for maximum capacity or duplicated memory (saves data into two memory banks)	Fully flexible set-up to suite the well or test conditions
Fits into standard downhole gauge carriers and shock housings	Suitable for wireline and tubing conveyed applications
Can be converted to SRO (surface read-out) modes	Additional flexibility at a modest additional cost

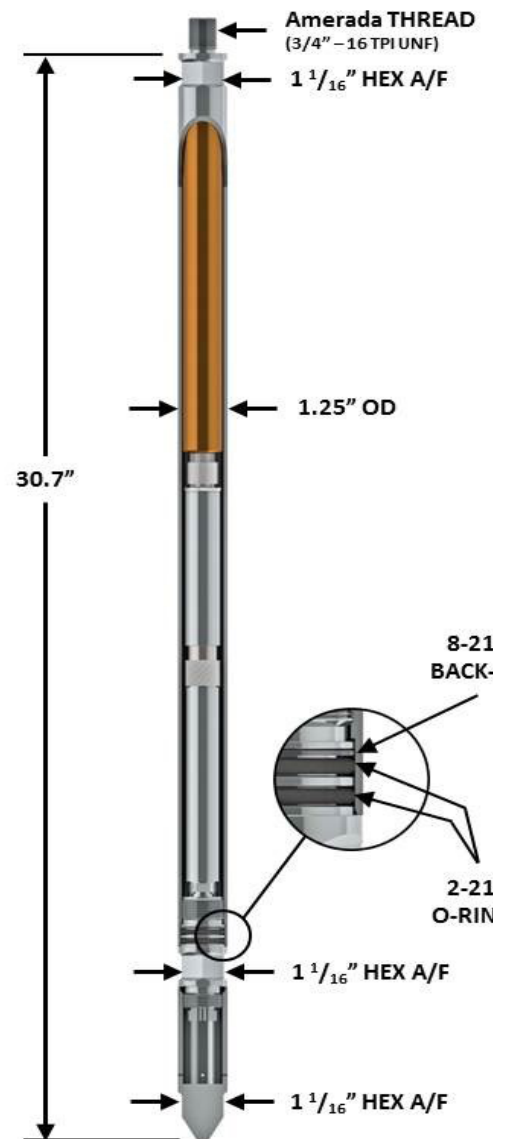
**QM200L**  
**for Demanding Applications**

- Hostile well, H<sub>2</sub>S and CO<sub>2</sub> corrosive environments
- Gradient survey
- Interface test
- Pressure build-up or draw-down test
- Production optimisation
- Slickline operations
- Reservoir evaluation, well testing and DST
- Static, flowing and build-up surveys

# Technical Specifications

Pressure	
Maximum external pressure	Must not exceed sensor range or 23 ksi max
Sensor range	5 options from 5 ksi to 25 ksi (23 ksi Max)
Sensor type	Quartz resonator
Accuracy	<±0.015% FSO
Drift	±0.02% FSO per year
Resolution (resolutions figures stated in brackets are for 0.1 second sampling interval only)	5 ksi <0.006 psi (<0.06 psi) 10 ksi <0.006 psi (<0.06 psi) 16 ksi <0.008 psi (<0.08 psi) 20 ksi <0.008 psi (<0.08 psi) 25 ksi <0.010 psi (<0.10 psi)
Temperature	
Maximum temperature*	Must not exceed 23 ksi or 200°C
Sensor range	3 options, 150°C, 177°C and 200°C
Accuracy	±0.15°C
Repeatability	<0.01°C
Resolution	<0.05°C (scales directly with sample rate)
Power	
Battery type	2CC lithium
Operating voltage	3.2 to 3.9 V
Battery Life**	Up to one year
Memory	
Sampling interval	0.1 second and 1 second to 1 hour
Capacity****	1,000,000 data sets (sequential mode) 500,000 data sets (redundant mode)
Record contents	Time, pressure, temperature
Other	
Materials	Inconel 718 and Hastelloy C-276
Service	Standard and H <sub>2</sub> S

## QM200L, 1.25" OD



\*Optional QM200EX-2M memory module is rated up to 185°C only  
 \*\*Battery life varies with temperature and sampling interval  
 \*\*\*Specified at 125°C and 5 second sampling interval  
 \*\*\*\*Double this capacity for optional QM200EX-2M memory module