



## *Surface Data Acquisition Electronic Quartz Gauge RMSmq*

Weatherford's multiquartz RMSmq is a surface, data-acquisition system designed to monitor up to 30 wells. It provides Web-enabled accessibility to readings on demand with considerable local storage capacity.

The RMSmq can be expanded with additional modules to accommodate data from other types of downhole sensors. Additional types of sensors that are supported include optical pressure/temperature (P/T) gauges, distributed-temperature sensing (DTS), and optical flowmeters.

### *Applications*

- Offshore and onshore multiple-well developments
- Monitoring data from additional sensors
- Integration with intelligent-completion, hydraulic control panels

### *Features, Advantages and Benefits*

- The RMSmq is a windows-based operating system that offers maximum flexibility and requires no custom programming.
- All output options and setup configurations can be performed at the wellsite.
- A modular design enables phased implementation of multiwell and multigauge projects.
- Data are recorded at the highest density irrespective of the transfer rate to the client's SCADA/server.
- High-density data enables detailed analysis of any production anomalies.
- If optical connections are available with the addition of optical P/T interrogators, the RMSmq can support optical-pressure, temperature gauges.
- If an in-well DTS optical connection is available, DTS can be supported by the addition of a DTS interrogation unit and optical switch.
- Up to eight installed optical flowmeters and phase-fraction meters can be supported with the addition of a Rheos™ module and optical P/T interrogator.
- The operator can view real-time and historical data through a Web browser on demand, enabling production optimization.



Multiquartz RMSmq surface data-acquisition system



# Surface Data Acquisition Electronic Quartz Gauge RMSmq

## Specifications

General	
Fully expanded well-monitoring capability	30
Flowmeters supported (with expansion)	Minimum of 8/Rheos™ module
DTS channels supported (with expansion)	9, 18, 24, or 32/DTS switch
Update-rate, selectable range	1 sec to no limit
Storage capacity (yr)	>2
Storage capacity with NAS option (yr)	Typically 5
Units of measure	Configurable (metric, Imperial, oilfield)

Accessories	
Line conditioner	Universal
UPS	110 or 220
Profibus	Interface card
Cabinet	Standard sizes, custom available
Network-attached storage (320 Gb minimum)	Quantum Snap NAS
Software	Web-enabled data visualization and transfer

Electrical Power	
Voltage, 110 nominal (VAC/Hz)	90 to 135 57 to 63
Voltage, 220 nominal (VAC/Hz)	180 to 255 47 to 53
Maximum current, 110	4.0 amp
Maximum current, 220	2.5 amp

Communications	
Ports	RS232, RS422, RS485
Ethernet	Two ports 10/100 Base T
Protocol	ASCII, flat-file ASCII, LAS (for DTS), ODBC, OPC, TCP/IP, Profibus (with additional hardware card)

Environmental	
Operating temperature range (°F/°C)	41° to 104° 5° to 40°
Shipping and storage temperature range (°F/°C)	-40° to 185° -40° to 85°
Thermal shock (°F per hr, °C per hr)	<18° <10°
Relative humidity, noncondensing	10 to 80% operating range 0 to 95% shipping and storage range



Cabinet Size	Overall dimensions (in./mm)		
	Height	Width	Depth
24 U	54 1,372	24 609	34 874
29 U	62 1,569		
38 U	78 1,976		

Components	Weight (lb/kg)	Height, U
Quartz interface rack	10.0 4.5	3
Monitor	18.5 8.4	1
Keyboard	13.5 6.0	1
RMS computer	60.0 27.2	2
Network hub	7 3.25	1
Serial port expander	4.1 1.86	1
Network bootbar		1

Optional Components	Weight (lb/kg)	Height, U
UPS	43.0 19.5	2
Line conditioner	68.0 31.0	2
Rheos flow system (optical)	134.0 65.0	14
DTS system (optical)	37.0 17.0	7
Network attached storage	26.0 11.79	1