



RMS Lite Optical-Sensor Reservoir Monitoring System

Weatherford's RMS Lite is a basic-level surface data-acquisition system, designed to monitor up to three Weatherford optical pressure/temperature gauges and distributed-temperature-sensing (DTS) systems and provide Web-enabled accessibility to readings on demand. With considerable local storage capacity, the RMS Lite can hold an extensive amount of high-frequency data over broad time periods. This system offers a cost-effective alternative for experiencing the benefits of in-well optical permanent monitoring systems.

Applications

- Offshore and onshore developments with air-conditioned control rooms
- Trial projects, appraisals, or small unit counts
- Enhancement of DTS monitoring applications
- Seamless integration with intelligent completion hydraulic control panels

Features, Advantages and Benefits

- The RMS Lite is designed to record data at the highest density, even if only a slow update rate is sent to the production facility's control system—enabling detailed analysis of any production anomalies.
- A network hub, floppy disk, and CD burner are included, reducing startup costs.
- A small footprint makes the RMS Lite system ideal for space-limited facilities.



Filter
Ethernet,
for laptop
Floppy
CD RW



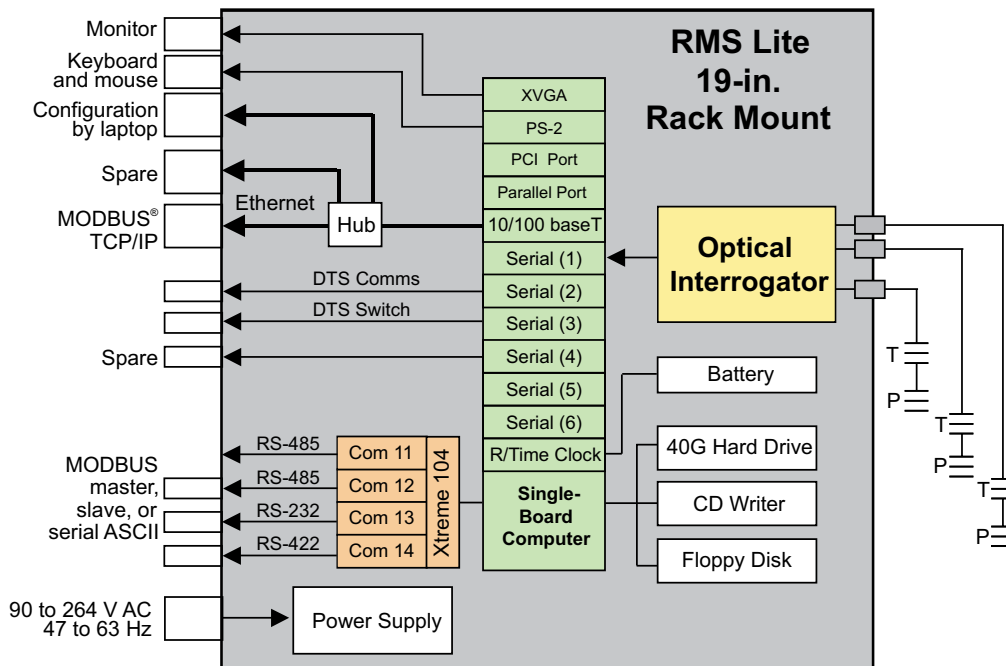
Ethernet
Keyboard
mouse
Monitor
232
Serial ports
485 422
Serial ports
232 232
3 E2000



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Features, Advantages and Benefits (continued)

- The RMS Lite offers support for up to three optical pressure/temperature gauges, reducing costs by minimizing the need for additional equipment.
- The RMS Lite can be used to support DTS by simply adding a DTS interrogation module and an optional optical switch.
- Passive downhole components facilitate upgrading of system hardware and software as enhancements become available, improving overall system performance.
- The operator can view real-time and historical data or demand, through a Web browser, enabling production optimization.



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Specifications

General Specifications	
Number of P/T gauges monitoring capability*	3
Number of flowmeters supported	8/Rheos™ module
Number of DTS channels supported	9 or 18/DTS switch
Update rate selectable range	1 sec to no limit
Storage capacity	> 300 days
Storage capacity with NAS option	Typically 5 yr
Units of measure (selectable)	Metric, Imperial, oilfield

Output Options	
MODBUS, serial 232, 422, 485, and TCP/IP	ASCII, RTU, master or slave
Simple serial 232, 422, 485	ASCII
OPC 2.0 data access standard	Client and server
Data files by LAN or WAN	Flat-file LAS format for DTS
Web-enabled data visualization and transfer	Optional
Direct SQL database access	ODBC driver

Electrical Power	
24 V DC	Optional
Voltage range	90 to 264 V AC
Frequency range	47 to 63 Hz
Maximum current 110	0.5 amp
Maximum current 220	1.0 amp
CE low-voltage directive, 73/23/EEC compliant	IEC 60204-1

Physical Data	
Dimensions (in./mm)	4U 19W x 6.8H x 21.5D 483W x 173H x 545 D
Weight (lb/kg)	47 21.5

Environmental Data	
Operating temperature range (°F/°C)	23° to +104° -5° to +40°
Shipping and storage temperature range (°F/°C)	-40° to +185° -40° to +85°
Thermal shock	<18°F/hr <10°C/hr
Relative humidity, non-condensing, operating range	10 to 80%
Relative humidity, non-condensing, shipping and storage range	0 to 95%
CE electromagnetic compatibility 89/336/EEC compliant	EN 61000-3-2, 3-3 EN 61326-1
Operational vibration	3.0 grms, random and sine
Drop (in./mm)	5.9 150

*20,000-psi (1,379-bar) P/T gauge





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Options

Monitor, keyboard, and mouse are optional.