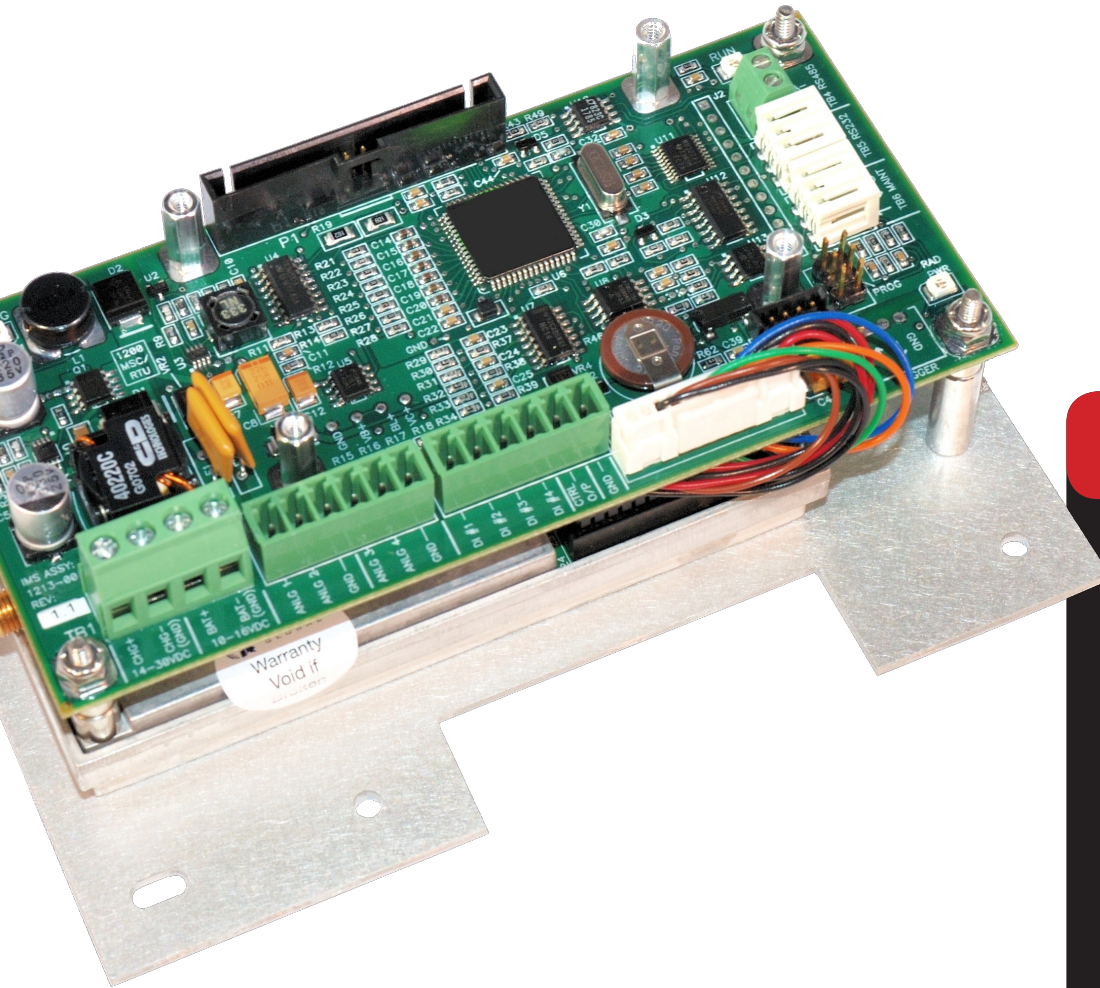


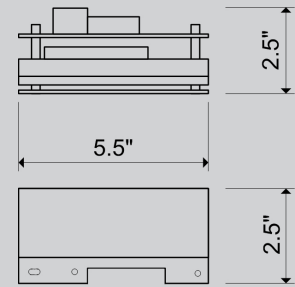
# RIGHTSMART 1200/2400



The Right Smart 1200/2400 is the ideal solution for monitoring oil and gas production and transportation assets. It's well suited for electronic flow meter (EFM), pump off controllers (POC), tank, and compressor monitoring applications. With its built-in Iridium modem, integrated EFM support, and high I/O count; the Right Smart 1200/2400 delivers unparalleled value, performance, and reliability. Its use of the Iridium network, comprised of constellation of over 60 low earth orbit satellites, allows it to communicate in areas where cellular is too unreliable and where the ground cover and terrain prove difficult for other satellite technologies. The Right Smart 1200/2400 is compatible with M2M's RMS and Intellisite<sup>SM</sup> services.

## FEATURES & BENEFITS

- Class 1 Division 2, Groups A, B, C, D certified terminal meets industry standards for electronic equipment in Oil and Gas markets.
- Modbus protocol interfaces directly with common SCADA devices such as RTU, PLC and flow meters to quickly and easily implement reporting and telemetry capabilities for remote equipment.
- RS485 serial interface allows connection to SCADA devices over long distances to enable flexible deployment in a wide range of operating conditions.
- Seamless global coverage based on the Iridium constellation enables operational benefits in remote regions.
- Expanded operating temperature range allows reliable deployment in some of the world's most demanding environments.
- Immediate reporting of digital status change (all data sent with report).
- Discrete inputs enable monitoring of local devices not using Modbus.



**PHYSICAL**

Size: 5.75" L x 3.5" W x 2.5" H (14.6cm L x 8.9 cm W x 6.4cm H)

**ENVIRONMENTAL**

Operating Temperature: -40°C to +60°C (-40° to +140° F)  
 Storage Temperature: -40°C to +60°C (-40° to +140° F)  
 Operating Humidity: 0 to 95% non-condensing  
 Optional LCD 4 x 20 characters; temperature compensated

**ELECTRICAL**

Solar Charger Input: 14VDC to 30VDC  
 Battery Input: 10VDC to 16VDC  
**POWER CONSUMPTION (TYPICAL @ 12VDC)**  
 Transmit mode: 7.2 W  
 Receive Only: 0.78 W  
 Idle: 96 mW  
 In Circuit Transient Protection

**SATELLITE COMMUNICATIONS** (Iridium Satellite Network)

Frequency Range: 1616.0 to 1626.5 MHz  
 Duplexing Method: TDD (Time Domain Duplex)  
 Multiplexing Method: TDMA/FDMA  
 Mobile Originated and Mobile Terminated Messaging

**CERTIFICATIONS / COMPLIANCE**

Satellite: Iridium Network Approved  
 CSA: Class I, Div. 2, Groups C, and D

**EXTERNAL INTERFACES**

Serial:  
 Qty (1) RS232 or RS485 (Software Selectable) external equipment port  
 Qty (1) RS232 Maintenance Port  
 I/O:  
 Qty (4) Digital inputs (Contact Closure or Pulse Accumulation)  
 Qty (1) Digital Open Collector, 15Vdc @ 100 ma Max  
 Qty (4) Analog Input, 0-5V or 4 ma to 20 ma (with external 250 Ohm resistors).

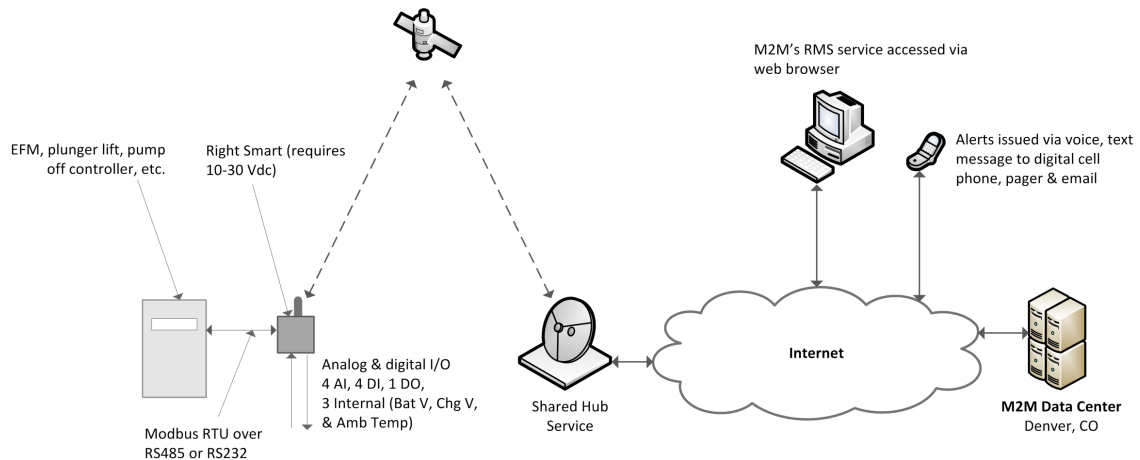
**INTERNAL INPUTS**

Battery Voltage, Charger Voltage, Ambient Temperature

**PROGRAMMING CAPABILITIES**

Remotely Programmable or Via Local Utilities  
 RS1200: Multiple EFM Configuration Types, Up to 4 runs per device  
 Alarms - Low DP, high DP, low SP, high SP, low flow rate, high flow rate, low process temperature, high process temperature, low battery voltage, high battery voltage, digital input change of state, Auxiliary Voltages (4).  
 RS2400: Up to 10 Multiple Variable Poll Strings and 32 Readings  
 High-High, High, Low, and Low-Low Alarm settings on each Reading  
 Change of State Alarms on Digital Inputs  
 Multiple options on Control Output:  
 Active on alarm trigger, External sensor enable, Timed Pulse

**Typical RightSmart System Schematic**



**Typical Right Smart Functionality**

- Right Smart scans I/O & third party devices, executes report-by-exception (RBE) logic, and pushes exceptions only to M2M Data Center.
- Right Smart pushes all points to M2M Data Center at scheduled intervals.