

elecsys RFM-100

Rail Friction Management Remote Monitor

The Elecsys RFM-100 is designed for 24/7 monitoring of railroad wayside top-of-rail friction management and gauge face lubrication systems.

The RFM-100 has a universal digital interface for connection to various system controllers for continual monitoring of the following:

- Power status (AC presence, solar panel output, battery level)
- Tank level
- Pump “on” time/revolutions
- Dispensed material volume
- Door status (main and tank)
- Wheel/axle count



FEATURES



User defined automatic friction modification system readings



Power via external 10-35 VDC, 12-25 VAC



Internal battery assures continued operation during power failure



External antenna for improved cellular signal strength and compatibility with steel enclosures

APPLICATIONS

- Remotely monitor wayside lubrication systems
- Both on demand and scheduled pump control for single or groups of units
- Eliminate costly travel to remote sites
- Improve visibility of remote assets
- Remotely enable/disable pump operation for maintenance and repairs

SPECIFICATIONS

Part Number	Cellular CDMA telemetry: RFM-100-N1-00 Cellular GSM telemetry: RFM-100-N3-00 Satellite telemetry: RFM-100-S1-00
Size	5.3"(135mm) x 7.8"(200mm) x 2.8"(72 mm)
Operating Environment	Temperature: -40°C to +85°C (-20o C to +70o C in battery backup power mode) Humidity: 0-95% non-condensing Weather Tight Enclosure and Connectors (IP67 or Better) UV Stable and Basic Chemical Resistant Cables
Input Connections	RS232 serial Interface for use with digital controllers Power level of solar panel Power level of rechargeable battery Pump ON time / revolution counter Tank level sensor Door status detection (x2) Wheel/Axle counter AC power presence
Power Consumption	3.5W @ 15V typical, 20W @ 15V transmitting Power consumption: 3.5W @ 15V typical, 20W @ 15V transmitting
Outputs	Pump control ON/OFF Relay

THE ELECSYS RFM-100

- Communication via either cellular network or geostationary satellite to Elecsys' secure application website.
- Use any web-enabled device to access the password-protected website and remotely program for alarm levels, reporting schedules, etc..
- Field units report data on a user defined schedule and when alarm conditions occur.
- Automatic alarm notification is sent via email and/or text message to single or multiple users for prompt corrective action.
- Authorized users can view current status of each site on the monitoring website.
- Multiple sites can be grouped by area or subdivision for quick review and control.

The RFM-100 is designed to withstand the harsh conditions at remote wayside locations. The units are weather-tight (IP67), lightning and power surge resistant, and will operate from -30 C to +70 C. RFM-100 units operate commonly available wayside power sources: 10-35 VDC, 12-25 VAC, or AC mains power, and have internal backup batteries to ensure continued operation during site power failure. The Elecsys RFM-100 provides real-time alerts and valuable operational data to ensure timely repairs and consistent service of railroad wayside equipment. This field data helps optimize maintenance efficiency and maximize system performance to enable users to realize the full benefits of their wayside equipment investments.

MAJOR MARKETS



Transit



Freight Rail