LSI-Robway carries a very diverse range of radio technology/software products. We can offer you a tailored solution for your telematics monitoring requirements.

LSI-Robway’s Wireless Technology Product Team, along with our global sales force, will work with you to make sure that we understand exactly what your needs are. We will ensure that all of the specifics of your application are understood to the smallest detail to be able to offer you the best solution possible.

With all of this critical information in place, we will create a solution for your needs by blending our suite of radio solutions, giving you a timely, functional solution to your needs.
INDUSTRIAL RADIO SOLUTIONS
Short Range and Long Range

Asset Monitoring
Gateway Router
Cellular Modem
Radio Modem
Transmitters

Load Systems International Inc has been developing industrial radio solutions for industrial applications since 1998 with our core focus being the crane and lifting industry. We have in excess of 50,000 radio sensors working in the market worldwide.

Our products are proven to work in high traffic RF environments such as shipyards, NAVY facilities, airports, large construction projects, offshore oil and marine applications.

As our products and applications have become more diversified the market demand for a robust, RF resistant radio solution has created opportunity for broader based mobile industrial application solutions.

Today we offer a diverse group of short and long-range radio solutions. These include Gateway Routers, Transmitters, Radio Modems, Cellular Modems and GPS Location Tracking.

We develop our radio technology in-house. Many vendors use 3rd party radio technology which does not allow them to control all aspects of the product application. At LSI-Robway, we know why, how and where our products will perform.

Our products feature FCC, CE and Anatel radio certifications. We also offer Zone 0, 1 & 2 intrinsically safe transmitters for a diverse range of applications.
**WIRELESS CELLULAR MODEM**

LSI-Robway’s Cellular Modem allows users to use a cell network to monitor live data.

Should your application require a monitoring solution where your equipment asset will travel over a broad geographic area, our GSM Cellular Modem is an ideal solution for your monitoring needs.

The 2G Modem will accept a SIM card to connect with your local regional cellular provider. With its GSM capability, it offers global access to the 2G cellular networks. Access is dependent on the cellular plan that you select from your cellular provider.

Depending on your application, you can blend a combination of our radio technology using the Long Range Radio Modem, Cellular Modem and Gateway Router to maximize your coverage and minimize your overhead costs for communication.

**Multi Input/Output Controller**

Owners and managers of equipment fleets and equipment assets are requesting the ability to manage and monitor core aspects of their equipment assets to reduce maintenance costs, manage maintenance schedules, increase productivity, reduce equipment downtime and reduce equipment theft.

- LMI Sensors: Load, A2B, Wind, Boom Angle, Length, etc.
- Engine/transmission temperatures & oil pressure
- Engine hours
- On/Off switches
- Analog inputs and digital inputs (can provide analog and digital outputs, also)
- Outputs can include: RS232, RS485, CAN bus, J1939

LSI-Robway can wirelessly transfer the output signals to our Long Range Radio Modem, Gateway Router or Cellular Modem.

Our solution will ensure that you are able to effectively monitor critical operational aspects of your valuable equipment assets.

**AS ALWAYS, LSI-ROBWAY WILL WORK WITH YOU TO TAILOR THE BEST SOLUTION TO YOUR NEEDS.**
The RT-0300 is a ruggedized, weatherproof, frequency-hopping-spread-spectrum radio modem designed to facilitate alarm and event data logging, as well as asset tracking and monitoring on worksites.

Use of the RT-0300 Worksite Modem can eliminate the need for the use of a cell or satellite modem, which eliminates any recurring monthly access fees associated with cell and/or satellite modems.

The RT-0300 Worksite Modem can output up to 1 watt of power (for FCC version) and can achieve a range of up to 10 miles/16 kilometers (dependent on sight line).

The CE ½ watt version will receive about 75% of the FCC range.

The firmware has been tailored for asset tracking applications by including a tag based job-site data framing protocol.

The RT-0300 can broadcast live LMI alarm codes showing out of chart, overload, A2B alarms, etc. In addition it can send engine data updates such as hours, temperatures, pressures, on/off data, etc. Data is received by the RT-0300-0001 Base Station Modem and transferred to our Dashboard Software or Equipment Tracker Database.

Received data can be viewed live on a PC via our Dashboard Software System. The Dashboard System can immediately send text messages to safety personnel’s cell phones identifying alarm status. Received data can also be logged into our Equipment Tracker Database system providing for online monitoring and reporting of key operational data.

WIRELESS GATEWAY ROUTER FEATURES:
- Receives all LSI standard radio communications
- Configurable to be the master of up to 32 sensors (which allows for two way communication) or to listen to unlimited number of devices (one way communication)
- Industrial tested (-40°C to 85°C) temperature ratings
- Humidity 0 to 100% RH
- Input power supply: 9 to 30V, or USB port, or other depending on model number, current requirement of 200mA maximum
- Output options for data include: CAN bus, J1939 networks, RS232 or USB
- IP65 water resistant aluminum enclosure
- Potted electronics for increased waterproof protection

**RT-0300 FEATURES:**
- 19200 bps RF data rate
- Mobile version with RS-232 interface
- Base station version with RS-485 interface
- Built-in GPS receiver for location tracking
- Tag based job-site data framing protocol

<table>
<thead>
<tr>
<th>FCC VERSION</th>
<th>CE VERSION</th>
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<tbody>
<tr>
<td>900 MHz ISM band FHSS license free operation</td>
<td>868 MHz ISM band FHSS license free operation</td>
</tr>
<tr>
<td>+30dBm / ½ Watt power output</td>
<td>+27dBm / ½ Watt power output</td>
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This image shows the RT-0300-0002 Modem installed on top of the crane cab, connected to a GS820 LMI Display inside of the crane cab.

The RT-0300-0002 is mounted to the roof of the crane using a pair of heavy-duty magnets.

All alarm data is sent from the display through the RT-0300-0002 Modem on the roof and to the RT-0300-0001 Base Station, typically located at the worksite office.

**MARKET PROVEN RADIO TRANSMITTERS**

Do you have an application that you would like to use wireless technology to transfer data to a host location?

LSI has been developing radio technology solutions since 1998. We are experienced in working in some of the most challenging environments found on the planet.

We develop our radio architecture in house so we are in complete control of how, where and why our technology functions.

Our typical transmission range is 4,600 feet or 1,400 meters. LSI can offer battery or hard powered transmitters.

We offer a range of radio transmitters and can customize a transmitter to suit your specific requirements.

Our transmitters can monitor wheat stone bridge strain gauges, pressures, temperatures, 0-5 volt signals, on/off signals, inclination, quadrature input, rotation measurement, position, speed and much more.

We also offer the option of Zone 0, 1 & 2 intrinsically safe certified transmitters with ATEX or CSA approvals.
Monitor remote transmitters using LSI-Robway’s **DESktop DASHBOARD SOFTWARE**

The Dashboard software features a WYSIWYG (what you see is what you get) design. It allows users to design their own screen layout to monitor live remote sensors/transmitters. Our Gateway Router can monitor remote transmitters and forward data to your PC desktop. Data can also be received from our Long Range Radio Modem and Radio Modem base station.

Import your own background picture, this can include a picture file, PDF, drawing. Then design your layout for monitoring your transmitter/sensor. Users can layout font size, colors, etc. Users can set up sensor limits, pre-warning alarm points and warning alarms. Alarms can be SMS text messaged to users.

Our software utility also provides users with the ability to setup their network protocol that provides for remote monitoring of sensor data over the Internet from virtually any location in the world.

Sample Dashboard screen image, monitoring data on an offshore platform:

Users can create unlimited Dashboards and monitor an unlimited number of sensors.

The Dashboard Software will data log sensor data to a CSV file, allowing data to be exported straight to Excel.

Data can also be logged into LSI’s Equipment Tracker SQL database software, interfacing with an unlimited number of LSI Gateway Routers or Radio Modem Base stations.

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**JOBSITE DASHBOARD FOR MONITORING MOBILE EQUIPMENT**

LSI has developed a Job Site Monitoring System using the Dashboard software. This allows users to monitor a wide range of mobile equipment operating on a job site using LSI sensors/transmitters, LSI’s long-range radio modem and radio modem base station, and optional cell modem.

Users can monitor their critical equipment sensor data live on the LSI Dashboard.
LSI-Robway can provide you with detailed database tracking and reporting of assets, equipment alarms, engine hours, service items (such as engine temperatures), pressures, and GPS location mapping. Our database runs on an SQL server. It is an online database accessible for the world over. Our servers have mirrored backups ensuring security and access to your valued data.

This screen shows asset description data, location information, service hour summary, current status of equipment configuration and data from the sensors.

This screen shows asset description data, location information, service hours summary, engine activity, engine oil, engine temperature and transmission data.
LSI-Robway provides 24/7 technical support. Global business runs around the clock and users expect immediate support. LSI-Robway is well positioned to offer this support with offices in Houston, TX; Quebec, Canada; Aberdeen, Scotland; Dubai, UAE and Adelaide, South Australia. Each location has experienced technicians capable of remote and on-site product support / troubleshooting.

MARKET-PROVEN TECHNOLOGY

With thousands of systems operating in the field globally, you can be assured that LSI-Robway Products offer you the highest level of reliability and access to the latest technological designs. There are 20 engineers in the LSI-Robway R&D department who perform mechanical, electrical, software and wireless engineering on a daily basis. Technology developed in-house allows us to have complete control over how, where and why LSI-Robway products function. We look forward to providing you with the best telematics monitoring solution for your next project, contact one of our worldwide locations today.