### L900 System Specifications

**General Specifications**
- **Operating Frequency**: 900 MHz, 868 MHz, 2.4 GHz  
- **Country Dependent**: Spread Spectrum band
- **Access Frequency**: 24 hours
- **Outdoor Range**: Up to 14 km (at 900 MHz) in open country, depending on frequency and antenna
- **Maximum Nodes**: 255
- **Communication**: See diagram on inside

**Battery Life**
- **Temperature Range**: -40°C to 60°C (-40° to 140°F)
- **Quiescent Current**: 15 µA

**Ordering Info**

**Data Loggers**
- DT2011B‡ Single Channel Vibrating Wire Data Logger
- DT2040‡ 20/40 Channel Vibrating Wire/Thermistor Data Logger
- DT2055B‡ 5/10 Channel Vibrating Wire/Thermistor Data Logger
- DT2306‡ Potentiometer Data Logger
- DT2350‡ 2 Channel Load Cell Data Logger
- DT2485‡ Digital Bus (DT-BUS) Data Logger
- DT4205‡ 5/10 Channel 4-20mA Transmitter Data Logger
- DTL201B‡ Uniaxial Tilt Data Logger
- DTL202B‡ Biaxial Tilt Data Logger
- ELGL1430‡ flexDAQ Data Logger CR300 (RSTAR Hub)
- ELGL1206‡ flexDAQ Data Logger CR6 (RSTAR Hub)

**RSTAR Radio & Antenna Kit**
- **Frequency**: Please specify frequency based on location
  - **North America**
  - **Worldwide**
  - **EU Countries/Europe**
  - **Australia**
  - **Brazil**
  - **Chile**
  - **Singapore**

**GeoViewer Software** *(optional, see at right)*

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* See brochure at www.rstinstruments.com
The RSTAR Array Radio Series uses wireless technology to provide automated data acquisition. A complete RSTAR L900 System uses Nodes at the sensor level, deployed in a star topology from a continuously active Hub, which consists of an L900 RTU interfaced to a flexDAQ Datalogger.

**FEATURES**

- **900 MHz, 868 MHz and 2.4 GHz spread spectrum band (country dependent) with extensive open-country range through use of simple dipole or directional antenna.**
- **Nodes comprised of sensors and compatible “DT Series” Data Loggers which can accommodate: vibrating wire sensors, potentiometers, MEMS tilt sensors, strain gauge (full bridge) sensors, digitally bussed (DT-BUS) sensors, 4-20 mA sensors, and thermistors.**
- **The nodes wake from low power and collect data from their attached sensors. This data, which includes the node serial number, data and diagnostics, is then sent wirelessly as a packet to the L900 RTU.**
- **The L900 RTU stores the data in a temporary register set which is overwritten as new data is received; there is an intermediate data logging function in the RSTAR L900 Node. The datalogger within the flexDAQ has ultimate responsibility for logging data.**
- **Power requirements for a single RSTAR L900 node is one lithium standard cell.**
- **The flexDAQ Datalogger can be powered by a solar panel, batteries or AC power.**
- **Data can be accessed at multiple locations via internet browser.**
- **Data is protected at all stages by encrypted, error-corrected transmission and storage.**
- **Fully compatible with RST GeoViewer Software.**

All “DT Series” Data Loggers are equipped with an option to add on a radio antenna and incorporate it into an RSTAR wireless system. L900 RSTAR radios and antennas can be ordered at time of initial ordering, or at a later date. An L900 RSTAR decal is also supplied for each unit to allow for proper identification.

In a typical RSTAR configuration, data is protected at all stages by encrypted, error-corrected transmission and storage.