

TCP/IP

**Security & Defense****OIL & GAS****SCADA & TELEMETRY****WIRELESS DATA COMMUNICATION****Remote Monitoring****INDUSTRIAL AUTOMATION****WATER & WASTEWATER****ELECTRIC UTILITIES**

## JSLM<sup>2</sup> ANALOG RADIO

VHF: 137-162, 150-174 MHz  
UHF: 406-422, 414-430, 450-470 MHz



The JSLM2 offers the third-generation design of a proven RF platform. The JSLM2 combines the dependability of its predecessors with an advanced RF design to boost the performance of this radio. The Windows-based software provides for easy unit programming.

**COMPACT DESIGN AND RUGGED CONSTRUCTION** The JSLM2 is available in a rugged 7.2 cubic inch steel case package that is ideal where space is a premium.

**VERSATILE PC PROGRAMMABLE OPTIONS** Optimally designed to transmit data with 0.5 - 5 watt power output, the JSLM2 offers digital tuning for audio in/out and output power with dual inputs for voice and data communications.

**FIVE WATTS** With improved power output and automatic power fold-back this radio gives your system increased work load capacity.

**BACKWARDS COMPATIBILITY** The JSLM2 offers enhanced features easily installed in established RNet systems while providing an easy migration platform for future system expansion and replacement of legacy equipment.

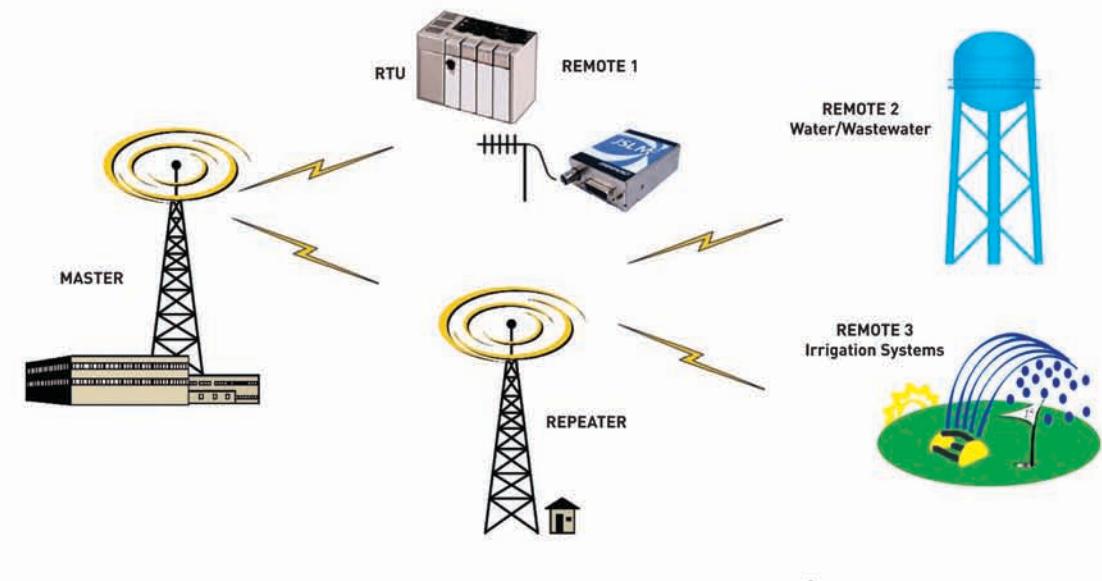
**FCC APPROVED AND REARMING COMPLIANT** Available in both VHF and UHF frequency bands, the JSLM2 operates in rearmed 12.5 kHz halfchannels.

**ONE YEAR WARRANTY** The JSLM2 is manufactured in the USA and backed by our standard 1-year warranty.

For wireless networks you can trust, depend on the high performance reliability associated with Dataradio. The new JSLM2 synthesized analog radio offers high quality, unsurpassed performance, robust functionality, and sound reliability...all at an unbeatable price.

## INTERFACE INFORMATION

|     |   |
|-----|---|
| Pin | Signal  |
| 1   | Channel Select 0 (CS0)                            |
| 2   | Channel Select 1 (CS1)                            |
| 3   | Channel Select 2 (CS2)                            |
| 4   | Tx Microphone Input (Mic In)                      |
| 5   | RNet compatibility Channel Select                 |
| 6   | Raw Battery Supply (B+)                           |
| 7   | Tx Auxiliary Data Input (Aux In)                  |
| 8   | Rx Auxiliary Data Output (Aux Out)                |
| 9   | Program Data I/O from PC (PGM IN OUT)             |
| 10  | Ready to Send (RS)                                |
| 11  | Squelch Disable or RSSI Analog Out (programmable) |
| 12  | Rx Audio Out (Audio Out)                          |
| 13  | Carrier Detect (DCD)                              |
| 14  | Push to Talk (PTT RTS)                            |
| 15  | Ground  |



Application Diagram

## JSLM2 SPECIFICATIONS

| GENERAL                 | VHF                                     | UHF                           |
|-------------------------|---|-------------------------------|
| Frequency Range         | 137-162, 150-174 MHz                    | 406-422, 414-430, 450-470 MHz |
| Frequency Resolution    | 2.5 kHz                                 | 6.25 kHz                      |
| Operating Voltage       | 6.0 - 15.0 VDC, 7.2 or 12.5 VDC nominal |                               |
| Operating Temperature   | -30° C to +60° C                        |                               |
| RF Connector Type       | BNC, 50 ohm                             |                               |
| User Interface          | DA-15 (15-pin D)                        |                               |
| Shipping Weight         | .50 lb                                  |                               |
| FCC Emission Designator | 11K0F3E                                 |                               |
| FCC Type Acceptance     | NP4-2422110610                          | NP4-2422140510                |
| IC Type Acceptance      | 773B-2110610                            | 773B-2140510                  |

## TRANSMITTER

|                                     |  |
|-------------------------------------|--|
| RF Output Power (programmable)      | 0.5 - 5 watts  |
| Duty Cycle                          | 50% (30 sec. max. transmit)                                |
| Rx to Tx Attack time                | <12 ms from PTT  |
| Frequency Tolerance                 | 1.0 ppm  |
| Spurious and Harmonic FM            | -20 dBm  |
| FM Hum and Noise                    | -40 dB   |
| Current Drain                       | 2 W : 1100 mA max, +7.2 VDC<br>5 W : 1600 mA max, 12.5 VDC |
| Modulation Distortion               | <3%  |
| Audio Input (Data Aux)              | 6 dB pre-emphasis or flat                                  |
| Audio Input Level (Microphone)      | 30 mV rms for 1.5 kHz deviation, pre-emphasis only         |
| Data (Aux) Input Level (adjustable) | 10 mV to 80 mV rms for 60% rated deviation flat AC coupled |

## RECEIVER

|                                |                                      |
|--------------------------------|--------------------------------------|
| Receiver Attack Time           | <3 ms                                |
| Carrier Detect (cold start)    | 40 ms (cold start)                   |
| Adjacent Channel Rejection     | 60 dB                                |
| Intermodulation Rejection      | -70 dB                               |
| Spurious and Image Rejection   | -70 dB                               |
| FM Hum and Noise               | 40 dB                                |
| Sensitivity (-12dB SINAD)      | -116 dBm (psophometrically weighted) |
| Conducted Spurious             | -57 dBm                              |
| Current Drain                  | <100 mA                              |
| Audio Distortion               | <3%                                  |
| Audio Response                 | 6 dB de-emphasis or flat, AC coupled |
| Audio Output (adjustable)      | 50 mV to 212 mV rms into 2k Ω        |
| Data (Aux) Output (adjustable) | 50 mV to 400 mV rms into 600 Ω flat  |

The JSLM2 is not a RoHS compliant product.

