

**SYNTHESIZED**

# 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.

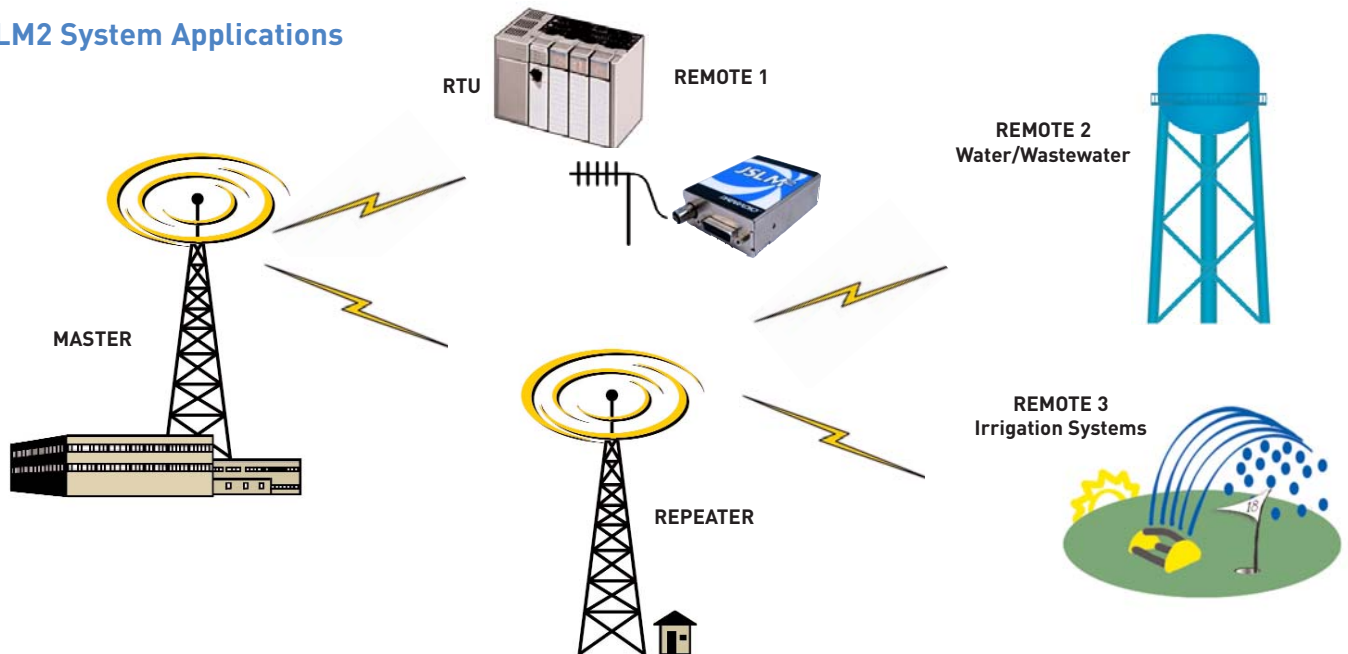
**BACKWARDS COMPATIBILITY** The JSLM2 offers enhanced features easily installed in established RNet systems while providing an easy migration platform for future system expansion and replacement of legacy equipment.

**FCC APPROVED AND REFORMING COMPLIANT** Available in both VHF and UHF frequency bands, the JSLM2 operates in reformed 12.5 kHz half-channels.

**TWO YEAR WARRANTY** The JSLM2 is manufactured in the USA and backed by our standard 2-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.

### JSLM2 System Applications



## 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

## 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

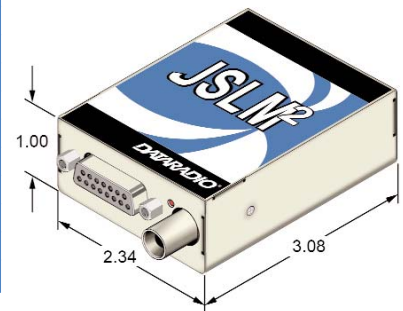
## TRANSMITTER

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 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

## MECHANICAL LAYOUT



The JSLM2 is not a RoHS compliant product.