SYNTHESIZED
RNET™ JSLM

TELEMETRY LINK
VHF: 132-150, 150-174 MHz
UHF: 406-430, 450-470 MHz

Designed with robust RF specifications in a compact package, the RNet JSLM is ideal for precise system designs where space is at a premium.

Unmatched warranty The RNet JSLM's is manufactured in the USA and backed by Dataradio's standard two-year warranty.
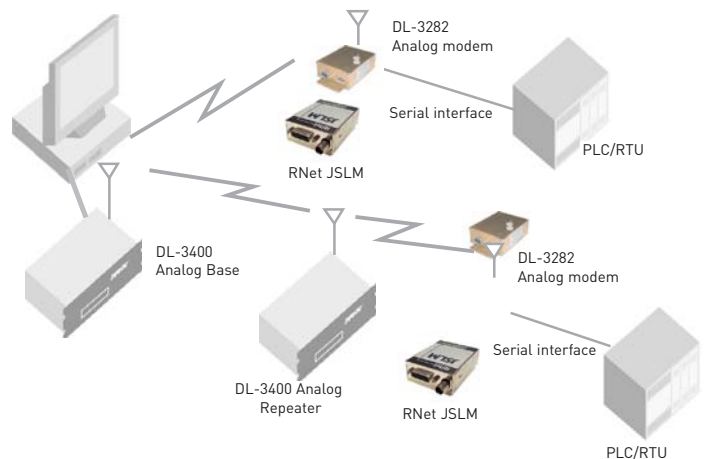
Enhanced RF specifications The RNet JSLM's RF specifications meet or exceed industry standards. Low transmit and receive attack times allow integration into new and existing wireline applications and new system designs using the newest popular peripherals.

Refarming compliant The synthesized RNet JSLM is capable of half-channel operation, as required by FCC spectrum refarming, as well as traditional full-channel.

RNet compatibility The RNet JSLM interface is a DA15 (15-pin D) and is pin-for-pin compatible with popular RNet telemetry units for ease of replacment units in established system designs.

Fast synthesizer RNet JSLM 's load algorithms reduce unit turn-on time to less than 40 ms and allow implementation of unique power conservation methods.

Programming RNet JSLM units are programmed with Windows®-based Field Programming Software and allow the selection of continuous audio, RSSI and carrier detect output. Internal voltage regulation allows operation on DC voltages from 6.0 to 15 VDC.

DL-3282
Analog modem

Serial interface

PLC/RTU

RNet JSLM

DL-3400
Analog Base

DL-3282
Analog modem

Serial interface

PLC/RTU

DL-3400 Analog
Repeater

RNet JSLM

RNet™ JSLM SPECIFICATIONS

GENERAL

	VHF	UHF
Frequency Range	132-150, 150-174	406-430, 450-470
Frequency Control	Synthesized	
Frequency Resolution	5, 6.25, 7.5 kHz (132-150 MHz) 2.5 kHz (150-174 MHz)	6.25, 10 kHz (406-470 MHz)
Operating Voltage	6.0 - 15.0 VDC	
Operating Temperature	-30° C to +60° C	
RF Connector Type	BNC	
User Interface	DA-15 (15-pin D)	
Dimensions (W x H x L)	2.34" (59.44 mm) x 1" (25.4 mm) x 3.627" (92.13 mm)	
Shipping Weight	.66 lb	
FCC Emission Designator	16K0FDE, 11K0F3E	
FCC Type Acceptance	NP42422430-001	NP42423414-001
IC Type Acceptance	984195377A	2984195346A

TRANSMITTER

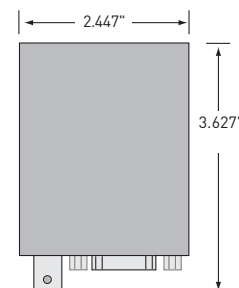|	VHF	UHF
Bandwidth	132-150:18 MHz, 150-174: 24 MHz	406-430: 24 MHz, 450-470 20 MHz
RF Output Power (dependent on input)	1-5 watts	1-4 watts
RF Output Impedance	50 Ω	
Duty Cycle (30 sec. max. transmit @ 25°C)	2 watts ~7.5V: 50% 5 watts ~11.25V: 50%	2 watts ~7.5V: 50% 4 watts ~ 11.25V: 50%
Transmitter Attack Time	<7 ms	
Frequency Tolerance	2.5 ppm	1.5 ppm
Spurious and Harmonic FM	-20 dBm	
FM Hum and Noise	-40 dB @ 12.5 kHz; -45 dBm @ 25 kHz	
Current Drain	2 W ~7.5V: 1300 mA max, +7.5 VDC 5 W ~11.25V: 1600 mA max, +11.25 VDC	2 W ~7.5V: 1200 mA max, +7.5 VDC 4 watts ~ 11.25V: 1600 mA max, +11.25 VDC
Modulation Distortion	<3%	
Audio Input	6 dB pre-emphasis or flat	
Input Impedance	11k Ωdata, 2k Ωaudio	
Audio Input Level	30 mV rms for 1.5 kHz deviation	30 mV rms for 1.5 kHz deviation
Data (Aux) Input Level (adjustable)	10 mV to 80 mV rms for 60% rated deviation	
Audio Input Coupling	5.5 VDC through 2.2k Ω	
Data (Aux) Input	AC coupled	

RECEIVER

	VHF	UHF
RF Input Imedance	50 Ω	
Frequency Tolerance	2.5 ppm	1.5 ppm
Receiver Attack Time	3 ms	
Carrrier Detect (cold start)	45 ms	
Selectivity	60 dB @ 12.5 kHz; -70 dB @ 25 kHz	
Intermodulation	-70 dB	
Spurious and Image Rejection	-70 dB	
FM Hum and Noise	40 dB @ 12.5 kHz; -45 dB @ 25 kHz	
Sensitivity (-12dB SINAD)	116 dBm	
Conducted Spurious	-57 dBm	
Current Drain	<90 mA	<95 mA
Audio Distortion	<3%	
Audio Response	6 dB de-emphasis or flat	
Audio Coupling	AC	AC
Audio Output (adjustable)	50 mV to 212 mV rms into 2k Ω	50 mV to 212 mV rms into 2k Ω
Data (Aux) Output (adjustable)	50 mV to 400 mV rms into 600 Ωflat	50 mV to 400 mV rms into 600 Ω flat

INTERFACE INFORMATION

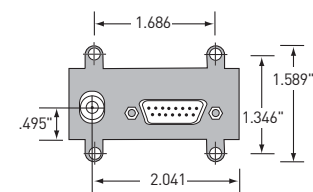| Pin	Signal
1	Channel Select 0 (CS0 N)
2	Channel Select 1 (CS1 N)
3	Channel Select 2 (CS2 N)
4	Tx Microphone Input (Mic In)
5	Open
6	6-9 / 10-15 VDC Raw Battery Supply (7.5 or 11.25 VDC nominal)
7	Tx Auxiliary Data Input (Aux In)
8	Rx Auxiliary Data Output (Aux Out)
9	Program Data I/O from PC (PGM IN OUT)
10	Ready to Send (RS)
11	Receive Monitor (Carrier Detect Override)/ RSSI Analog Out
12	Rx Audio Out (Audio Out)
13	Carrier Detect (DCD)
14	Push to Talk (PTT RTS)
15	Ground

MECHANICAL LAYOUT

2.447"
3.627"

TOP VIEW

1.021"

SIDE VIEW

1.686"
1.589"
.495"
1.346"
2.041

FRONT VIEW