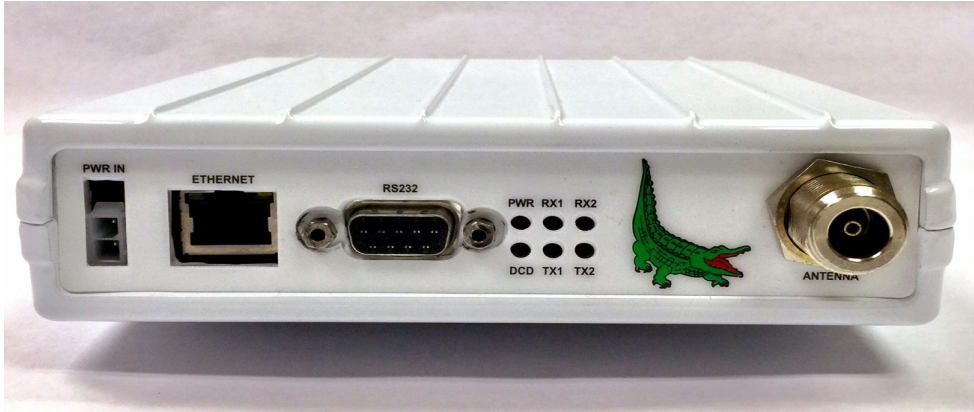# NEW 1.4 GHz LICENSED RADIO

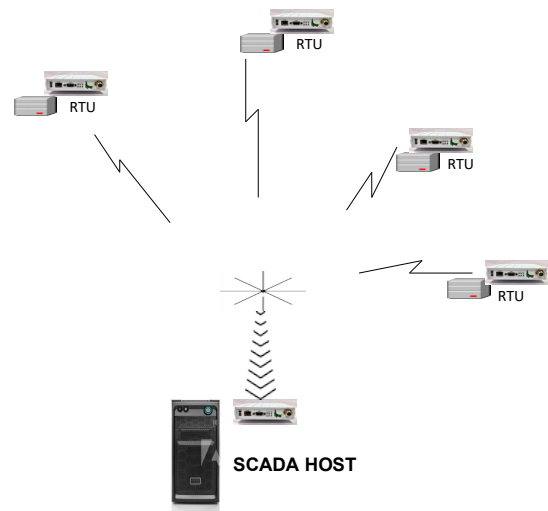
Overview

- **Designed for Ethernet and RS-232 Wireless SCADA Networks**

- **Operates within 1.4 GHz FCC Licensed Spectrum**

- **Diagnostics, On-Line Monitoring and Parameter Controls**

- **Automatic Global Frequency Control**

Alligator's Model CIR1470L-QS1 1.4 GHz Critical Infrastructure Radio is ideal for licensed point-to-multipoint wireless data link operations in the licensed FCC 1427 – 1432 MHz band. The QS1 is designed and manufactured to superior specifications for performance and long-term reliability. Digital modem technology and Ethernet and RS-232 standard serial data interfaces ease of system integration tasks. The QS1 provides a unique system diagnostic port for on-line configuration and remote terminal interconnectivity management.

Applications

Telemetry and SCADA Link data operations for Water, Waste Water, Fire Station Signal Controls, Petroleum and Gas Production, Metering and Transport monitoring applications, as well as services in Electrical Energy metering and distribution systems. Ideal for 1.4 GHz Government data communications and Railway / Transportation Signaling.

Alligator
Communications, Inc

Model CIR1470L-QS1 Radio

Technical   Specifications

TRANSMITTER

Frequency Range(MHz):	1427.0 – 1428.5
	1428.5 – 1432.0
RF Output Power:	0.6 Watts
Output Impedance:	50 Ohms
Duty Cycle:	50%
Attack Time:	< 6 msec
Spurious Emissions:	< -60dBc
Temperature Range:	-30 ºC to +60ºC
Frequency Stability:	± 1.0ppm
Programmability Step Size:	1.0 Hz
Data Rates:	3-19.2kbps
Channel Bandwidths:	12.5 kHz
	25.0 kHz
	50.0 kHz

RECEIVER

Frequency Range (MHz):	1427.0 – 1428.5
	1428.5 – 1432.0
Temperature Range:	-30 ºC to +60ºC
Frequency Tolerance:	± 1.5 ppm
Programmability Step Size:	1.0 Hz
Sensitivity (12dBSINAD):	< 0.30uV
Input Impedance:	50 Ohms
Rx Attack Time:	< 1.5 msec
Spurious & Image Reject:	< -70 dBm
Intermodulation:	< -75 dBm
Selectivity @12.5kHz:	< -80 dBm
Selectivity @25.0kHz:	< -85 dBm
Selectivity @50.0kHz:	< -90 dBm
Data Rates:	.3-19.2kbps
Channel Bandwidths:	12.5kHz
	25.0 kHz
	50.0 kHz

GENERAL

Input Power:	13.6Vdc
Rx Current:	80mA
Tx Current:	750mA
Duty Cycle:	50%
Attack Time:	< 6msec
Temperature:	-30 ºC to+60ºC
Humidity:	95% @40ºC
Data Interface:	Ethernet or RS-232
Data Connector:	D-Sub9F

CERTIFICATION

FCC Certification:	Part90.259
FCC Identifier:	CIR-1470L
FCC Emission Designators:	12K5F1D
	25K0F1D
	50K0F1D

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