

1.4 GHz

Alligator Communications Model CIR1470L-QS1 Radio

NEW 1.4 GHz LICENSED RADIO



**Designed for SCADA – Telemetry
Wireless Data Networks operating
within the 1.4 GHz FCC Licensed
Spectrum**

FCC Part 90.259 Rules

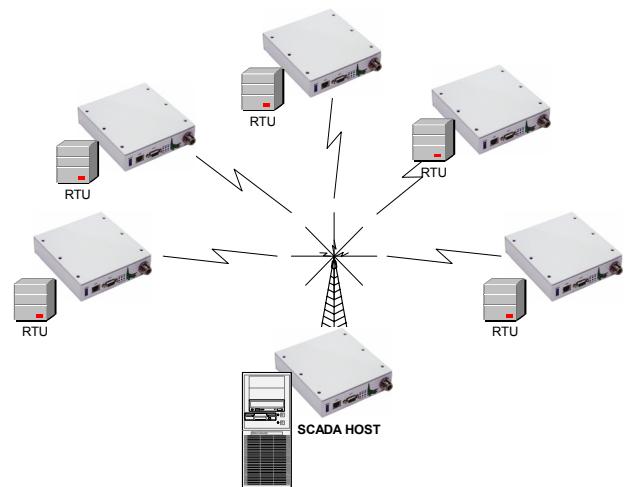
Alligator's Model CIR1470L-QS1 1.4 GHz Critical Infrastructure Radio is ideal for licensed point-to-multipoint wireless data link operations on the FCC 1427 – 1432 MHz band allocation. The QS1 addition to our CIR series of radios for Telemetry and SCADA is designed and manufactured to superior specifications for performance and long-term reliability.

Features

Digital Modem Technology and RS-232 Standard Serial Data Interfaces for ease of System Integration Tasks. Provided with a unique local 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 (GHz): 1427.0 – 1428.5
1428.5 – 1432.0
RF Output: + 31 dBm
Output Impedance: 50 Ohms
Duty Cycle: 50 %
Attack Time: < 6 msec
Spurious Emissions: < -60 dBC
Temperature Range: -30 °C, +60°C
Frequency Tolerance: +/- 1.5 PPM
Programmability Step: 6.25 kHz
Data Rates: .3-19.2 kbps
Channel Bandwidths: 12.5 kHz
25.0 kHz
50.0 kHz

RECEIVER

Frequency Range (GHz): 1427.0 – 1428.5
1428.5 – 1432.0
Temperature Range: -30 °C, +60°C
Frequency Tolerance: +/- 1.5 PPM
Programmability Step: 6.25 kHz
Sensitivity (12 dB SINAD): < 0.30 uV
Input Impedance: 50 Ohms
Rx Attack Time: < 1.5 msec
Spurious & Image Reject: < -70 dBm
Intermodulation: < -75 dBm
Selectivity @ 12.5 kHz: < -80 dBm
Selectivity @ 25.0 kHz: < -85 dBm
Selectivity @ 50.0 kHz: < -90 dBm
Data Rates: .3-19.2 kbps
Channel Bandwidths: 12.5 kHz
25.0 kHz
50.0 kHz

GENERAL

Input Power: 13.6 VDC
Rx Current: 80 mA
Tx Current: 750 mA
Duty Cycle: 50 %
Attack Time: < 6 msec
Temperature: -30 °C, +60°C
Humidity: 95% @ 40°C
Data Interface: RS-232
Data Connector: D-Sub 9F

CERTIFICATION

FCC Certification: Part 90.259
FCC Identifier: CIR-1470L
FCC Emission Designators: 12K5F1D
25K0F1D
50K0F1D

OPTIONS and ACCESSORIES

NMS/Diagnostics: On-Line Monitoring and Control of Radio Parameters

Limits & Counters: On-Line control of operating parameters, event counters and diagnostic limits

AGFC: Automatic Calibration of Internal Radio Frequency References

DC-DC Converters: External 12-24 VDC, 12-48 VDC, and 12-125 VDC



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