

# 900 MHz

## Alligator Communications Model 2888 Series

### 900 MHz Licensed MAS Radio



#### Features:

- Ethernet and RS-232 Interfaces Concurrently
- Telnet network management
- AES-256 Encryption with SHA256 key generation
- Robust 4GFSK modulation
- Automatic Frequency Calibration

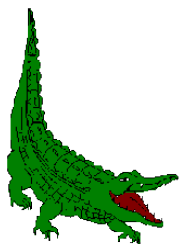
#### Applications:

- SCADA Systems
- Utility Data Communications
- Oil & Gas Pipeline Monitoring
- Water Systems
- Distribution Automation

#### General Description

Alligator now offers the most secure and robust multiple address licensed radio in the industry. Featuring both Ethernet and RS-232 interfaces concurrently, it automatically encapsulates and encrypts any SCADA protocol on to a secure 4GFSK modulation format that is sent over a standard 12.5 kHz frequency channel. Frequency synthesis permits selection of any channel pair in the 900 MHz band to  $\pm 1$  ppm stability.

Single unit with four modes of operation: Master, Polling Master, Repeater, and Remote. One unit backs up all four modes. Automatic frequency control keeps all remote radios phase locked to the master frequency. Several modes of network management including Telnet and web browser permit tight monitoring and control, totally transparent to primary data traffic. This makes Alligator the clear choice for MAS radio systems due to its superior flexibility and system transparency operations.



**Alligator**  
Communications, Inc.

# Model 2888 Series Remote Radio

## Technical Specifications

### TRANSMITTER

RF Output Power	0.5W to 5W
Impedance	50 Ohms
Frequency Range	820 MHz-960* MHz
Frequency Step Size	1 Hz
Frequency Stability	±1 ppm
Modulation	4GFSK
Symbol Rate	4800 Hz**
Data Rate	19200 bps
Maximum Frequency Deviation	2400 Hz**
Bandwidth	12.5 kHz**

### RECEIVER

Input Sensitivity	-110 dBm at 10 <sup>-6</sup> BER
Impedance	50 Ohms
Frequency Range	820 MHz-960* MHz
Frequency Step Size	12.5 kHz
Frequency Accuracy	±1 ppm
Modulation	4GFSK
Symbol Rate	4800 Hz**
Data Rate	19200 bps
Bandwidth	12.5 kHz**

### GENERAL

Frequency	820 MHz-960* MHz
Input Voltage	13.8 Vdc
Current Consumption	
Receive Mode	< 100 mA
Transmit (5W)	< 1.7 A
Data Rate	19200 bps
Connectors	
Antenna	Type N female
Power	2 Pin Captive Rectangular
Data (RS232)	DB9F
Data (10/100 Ethernet)	RJ45
Environment	
Temperature	-30°C to +60°C
Humidity	95% at 40°C
Dimensions	6.75" x 1.5" x 5.5"
Weight	2 pounds

\*Other frequency bands available on special order

\*\*Other bandwidths available on special order by changing symbol rate and frequency deviation

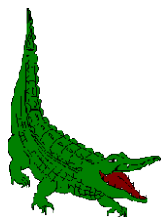
### CERTIFICATION

FCC Certification: Part 90

FCC ID: JIL2888

### Ordering Information (Suffix)

Series A	VF interface
Series B	Built-in Bell 202 Modem RS232 interface
Series D	4800 Baud RS232 Interface
Series D9	9600 Baud RS232 interface
Series E	Ethernet and RS232 Interface



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