

## **The AirLink Raven CDMA**

This rugged, intelligent wireless data platform is designed to enable real-time, two-way communications with remote assets. The AirLink Embedded Operating System (ALEOS) is the power inside the Raven. ALEOS has its own embedded TCP/IP stack which enables transmission of serial data from non-IP devices. ALEOS enables several functions including remote configuration and diagnostics, packet assembly and disassembly (PAD) for UDP or TCP, and telemetry protocol spoofing and conversion. The Raven CDMA is a powerful and versatile communications device.

AirLink offers a variety of solutions to enable many telemetry applications to operate in the dynamic IP addressing environment of CDMA/1XRTT networks. ALEOS, in conjunction with AirLink IP Manager, enables applications to address remote devices by name (e.g. remote1.ddns.company.com). This dynamic DNS (DDNS) function is done automatically and securely any time the IP of the device changes. AirLink IP Manager then updates a DNS server. ALEOS can update IP assignment to host applications in addition to or instead of the AirLink IP Manager.

The unique intelligence within ALEOS enables virtually any type of remote device to connect via the public CDMA/1XRTT network. It can be used to replace existing landline, private radio, CDPD, and circuit-switched installations.

## **Specifications**

### **RF Features:**

- 224 mW RF output (+23.5 dBm)
- Full duplex transceiver
- Dual-band support for both 800 MHz cellular and 1.9 GHz PCS bands
- Adheres to CDMA authentication as specified in CDMA2000 1X

### **Packet Mode Features (1xRTT):**

- Data rates up to 153.6 kbps (forward channel) and 76.8 kbps (reverse channel)

### **Power Specifications:**

- Advanced Power Management features
- Low power consumption
- Input Voltage: 10 VDC to 28 VDC
- Input Current: 40 mA to 200 mA
- Typical Receive: 200ma at 12VDC
- Typical Transmit: Approximately 200ma at 12VDC
- Dormant connection [idle for 10-20 seconds]: 40 ma at 12 VDC

### **Environmental:**

- Operating ranges: -30°C to +70°C (10% duty cycle limit above 60°C)
- Humidity: 5%-95% Non-condensing

### **Physical Characteristics:**

- Weight: < 1 lb.
- Size: 3" wide x 1" high x 5.1" long
- Status LEDs
- RF Antenna Connector:  
50 Ohm TNC
- Serial Interface:  
RS232 DB-9F

### **Warranty:**

- 1 year hardware parts and labor