AirLink Communications

We make wireless data work

Raven NGE℠

AirLink is a leading wireless data solutions provider helping organizations put their remote commercial assets on line. AirLink's family of products include communications platforms, end-user software applications, intelligent clients, and APIs for integration with other enterprise application software.

AirLink solutions offer guaranteed investment protection and migration to Next Generation Wireless Services including:

- **Wireless Service Equipment Guarantee℠**
- **Next Generation Enabled Solutions (NGE℠)**
- **Trade up credit on new AirLink products**

AirLink Communications

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The AirLink Raven "Next Generation Enabled" - NGE℠ is a rugged modem designed for fixed and mobile applications. This product offering is a modular wireless communication platform designed to provide customers with the flexibility to migrate to Next Generation Wireless Services while maximizing their investment.

When a Next Generation Enabled product is purchased from AirLink, it includes a free one-time upgrade to either GSM/GPRS or CDMA/1XRTT technology. Prior to upgrading, a customer must be satisfied that critical service factors such as rate plan, hardware, coverage and dynamic IP assignments are resolved for their application(s). AirLink's Next Generation Enabled products include a Universal Modem Interface - UMI℠ that enables a modular approach to selecting the desired communication technology. The NGE℠ products from AirLink initially include a module for CDPD. This allows a customer's existing application to take advantage of this proven technology that currently satisfies the critical service factors.

The AirLink Raven's embedded TCP/IP stack and unique telemetry-specific functions enable virtually any type of remote device to connect via the CDPD network. Thousands of Ravens are currently installed with many different types of Remote Terminal Units (RTUs) in several Telemetry/SCADA applications. The Raven is a low-cost replacement for existing landline, private radio, and circuit-switched cellular installations.

Applications

Utilities
- Natural Gas Wellhead Monitoring
- C&I Meters
- Transmission Line Flow Meters
- Energy Management Systems

Transportation
- Traffic Measurement
- Traffic Control
- Variable Message Signs

Atmospheric/Environmental
- Weather Monitoring
- Irrigation Control
- Seismic Monitoring
- Water Level Monitoring

Financial
- Automated Teller Machines
- Point-of-Sale
- Lottery Machines

Special Features:
- **Over-the-air updates of AirLink Firmware**
- **Universal Modem Interface (UMI℠) – Provides a modular communication platform**

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Application Interfaces

Standard interfaces include:

AT command serial character streams (uses embedded TCP/IP stack).

Host TCP/IP stack communicates with Raven. Supports: PPP, SLIP, TCP, UDP, and Telnet.

Windows 95/98/2000/NT Dial Up Networking communicates with Raven using PPP/SLIP.

RTU protocol conversions
- Modbus
- BSAP
- DNP
- DFI
- PSEM (ANSI C12.19)

Wireless ACE

Windows 95/98/2000/NT modem configuration utility

- **Configure AirLink Modems locally or remotely without using AT commands.**
- **Monitor the operating status locally or remotely.**
- **Secure communications with password protection. Reduce troubleshooting time and support costs.**

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Raven NGE℠ - CDPD Module Specifications

Physical Characteristics

Weight:	< 1 lb.	
Size:	3" width x 1" height x 5.1" length (5.8" incl. connector.)	
Status LEDs:	Power	RSSI	Channel Acq.
	Block Errors	Link Status	Transmit/Receive
	Network Registration		
RF Antenna Connector:	50 Ohm TNC		
Serial Interface:	RS-232 DB-9F		
	1,200-38,400 bps		

Environmental

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

Full Duplex Wireless CDPD Modem with Integrated TCP/IP

Transmit Power:	600 mW
Transmit:	824-849 MHz
Receive:	869-894 MHz
RF Protocol:	CDPD 1.1
AirLink Data Rate:	19.2 Kbps
Serial Protocols:	AT Commands, PPP, SLIP

Power Requirements

Input Voltage:	10 VDC to 30 VDC	
Input Current:	30mA to 130mA	
	Typical Receive:	50mA at 12VDC
	Typical Transmit:	100mA at 12VDC

Warranty

Software:	1 year updates & feature enhancements
Hardware:	1 year parts and labor

Using Wireless ACE, support personnel can monitor or configure AirLink modems from anywhere at any time.

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