

AEROMATE™ WSC

Uplink Manager

9203-2031090



FEATURES

- ▶ **RS-232/485 Serial Port**
9600, 19.2k and 38.4k baud
- ▶ **Network Uplink**
centralized data collection
- ▶ **Two Switch Outputs**
low side, 20 V @ 2 A drive
- ▶ **Two Switch Inputs**
dry contact or 0-30Vdc logic
- ▶ **Network Ready**
Bluetooth 802.15.4 wireless
- ▶ **Network Coordinator**
links sensors and controls
- ▶ **Data Logging**
network data repository
- ▶ **Modbus RTU Slave**
R/W coils and data registers

PC SOFTWARE

- ▶ **IDM™ Interactive Utility**
monitor, logger, tester
- ▶ **ChartWriter™**
graphical program generator

APPLICATIONS

- ▶ **Remote System Control**
- ▶ **SCADA Interface**
- ▶ **Multiple Well Control**
- ▶ **Digital Signal Router**
- ▶ **Oil & Gas production**
- ▶ **Waste Management**
- ▶ **Water Management**
- ▶ **Limit Monitoring**

Compact — Uplink Manager provides both a coordinator for a wireless Personal Area Network (PAN) and a switch router. Whether the need is for wireless data logging, a flexible, programmable control systems manager or a SCADA system portal to a wireless networks, the OKC Uplink Manager is designed to meet the challenge at the right price.

Rugged and durable, AeroMate's molded enclosure protects against harsh weather, corrosive gases, salt spray and physical demands of industrial environments. Lock down external power plug and RS-232 or RS-485 serial port connector provide easy access and vibration resistant connections. Conformal coating and gold plated electronics round out the suite of AeroMate's environmental protection features.

Features include two selectable switch sensor inputs or outputs and two high capacity, 4/3-AA rechargeable battery modules to meet the power demands of the wireless 802.15.4 network Coordinator functions. Integrated vTagNet technology manages event and numeric data tags for functional collaboration with other networked wireless sensors and controls. Modbus RTU slave support allows easy integration with a wide range of SCADA systems. Switch inputs and outputs are active High/Low and pulse width configurable.

Onboard intelligence is the difference between getting what you want and having to accept what you get. AeroMate's Integrated Device Manager graphical program editor and compiler make getting what you want as simple as drawing a flow diagram. Combine easy, graphical programming with the flexible vTagNet™ technology and any sensing and control configuration is only limited by the imagination.



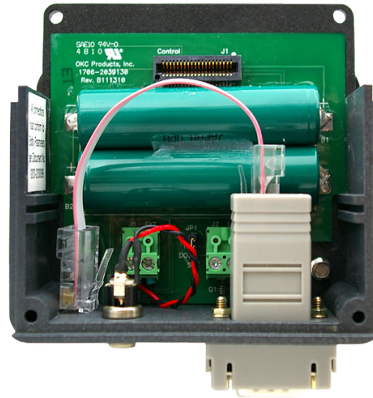
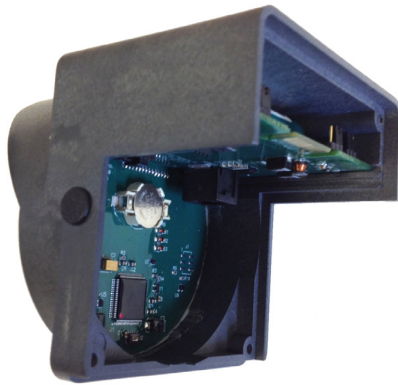
On-board serial RS-232/485 communication port and Modbus compatibility provides easy integration with new or existing SCADA systems.

Flexible power system uses rechargeable, NiMh batteries or auxiliary power source. An external power jack allows easy hook-up to power sources and solar panels for battery charging. Auxiliary power sources may be used with or without rechargeable batteries installed.

Reliable, long term performance is a major benefit gained from the evolution and refinement of AeroMate's advanced design. Patented SunSmart® power management technology ensures reliable, long term performance. All connections are protected from static electric shock. A time tested user interface, low power operation and rugged packaging provide a high level of field reliability.



AERO MATE™ WSC



P/N 9203-2031090 AeroMate front cover assembly and uplink manager module shown disassembled. Front cover assembly, shown with wireless kit, is easily removed for routine sensor maintenance.

Uplink Manager Specifications

Manufactured under U.S. Patents 6,194,793 B1 and 6,462,507 B2

Enclosure

Weight	2.0 lbs (0.7 kg) Shipping 2 lbs (0.9 kg)
Dimensions	3.7 W x 5.0 H x 4.2 D (inches) (9 cm x 13 cm x 11 cm)
Type	Gasket Sealed NEMA 4X
Material	Thermoplastic Polyurethane

Power

Standard	(without wireless) Two (2) 4/3-AA Batteries 4000 mAh Nimh Cells
Drain	50 mW Average
External	Jumper Set Input Ranges Low (<6V) or High (>6V) Using 2.5 mm Power Jack

Charging

Solar	Shatterproof Solar Panel 2 Watt Panel - Standard 6 Watt Panel - Wireless
Other	Using 2.5 mm Power Jack: 4.5 - 20.0 Vdc with 1.2 W max. power dissipation

Display

Type	32-Character LCD Display with Auto-Contrast Control
Window	Polycarbonate Coated

Temperature

Operating	-20°F to +150°F (-30°C to 65°C)
-----------	------------------------------------

Log Data Memory

Type	Non-Volatile FRAM
Log Size	32k-Byte memory

Auxiliary Battery Module

Batteries	Two (2) 4/3-AA Batteries 4000 mAh Nimh Cells
Charging	SunSmart® technology with independent full charge shut-off control

Auxiliary Solar Charger

Power	6 Watt solar panel 5 Vdc @ 1200 mA
Mounting	6 ft. cable with integral 2.5 mm Power Jack

I/O Connections

Inputs	Switch Input 0-30 Vdc 15kV static protection
Outputs	2x NPN Low Side Switch Max. +20 Vdc @ 2 A

Wireless

Bluetooth	802.15.4
SNAP	Up to 1000 ft (300 m) LOS
XBee-Pro	Up to 3000 ft (1 km) LOS

Certifications

CSA	Non-Incendive, Intrinsically Safe for Use in Class 1, Division 1 and 2, Group C and Group D Hazardous Locations
-----	---

DISPLAY ITEMS

DATA Key

- Operation Page
 - Battery and charge status.
 - Temperature history.
 - Wireless network status.
- Device Page
 - Device identification.
 - Manufacturing information.
 - Service call information.

SET Key

- System Setup
 - Date/Time clock setup.
 - Wireless network setup.
 - Network & log update setup.

RS-232/485 Serial Port

Port Setup	
Baud:	9600, 19200, 38400
Parity:	None
Data Bits:	8
Flow Control:	None
Internal	8-Pin RJ-45
External	9-Pin D-Sub DCE (DTE optional)

Communications Protocol

Modbus RTU

CONTROL KEYS

PWR Power On/Off switch.
Loads application program.

DATA Selects status, operation
and device displays.

SET Selects items and variables
that are user settable.

SET KEYS

▶▶ Move cursor right.
Selects menu item.

▲ Increment cursor selection.
Move to next item.

▼ Decrement cursor selection.
Move to previous item.

 **OKC Products, Inc.**

P.O. Box 1560
Berthoud, CO 80513 USA

p 970.532.1774 f 970.532.1776

www.okcproducts.com