

## Operator's Guide

### AeroMate™ WSC – Uplink Manager



Non-Incendive, Intrinsically Safe for Class I, Division 1 Hazardous Locations

U.S. Patent Numbers 6,194,793 and 6,462,507  
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## Introduction

### Local Network Management

The Uplink Manager serves as a local network coordinator and interface to internet enabled gateways. To support the additional network coordinator power demands, the Uplink Manager includes an extra, auxiliary battery pack.

### Customizable Management

Using the Integrated Device Manager (IDM) and web based version control system, the Uplink Manager module is fully customizable to meet any simple or complex network management task.

### Configurable Serial Ports

The Uplink Manager's RS-232 and RS-485 serial port provides an interface to internet enabled gateways, long range radios or SCADA systems. The standard communication protocol is Modbus RTU.

### Configurable Switch I/O

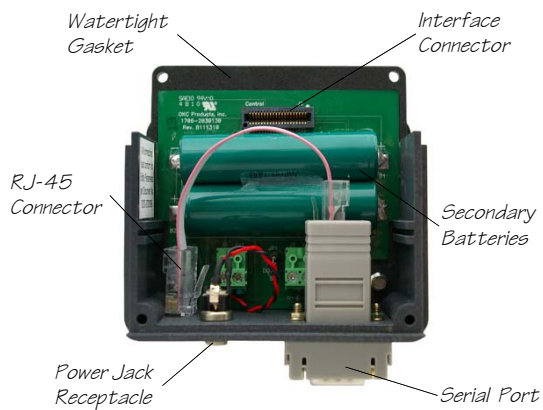
Two digital switch I/O's are jumper selectable for input or output functions. Switch configuration allows for normally open (NO) or normally closed (NC) states as well input Time Constant and Pulse Width output control.

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## Uplink Manager Module



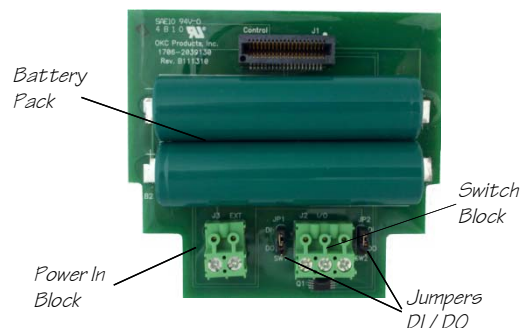
The Uplink Manager Module includes an auxiliary 2xAA Battery pack, an external RS-232/485 9-Pin serial port connector, an external power jack receptacle, a universal 2" pipe or motor valve mount, and rear panel gasket. This module also includes two digital switch I/O's that are jumper selectable for input or output functions.

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## Uplink Manager Module Board



Removable, screw terminal blocks allow convenient hook up with 18 to 24 AWG wire. A three terminal switch I/O block provides switch I/O and ground connections.

Jumpers select switch input (DI) or output (DO) for Switch Block SW1 and SW2 connections.

Power In block is used to connect solar charger or other external power source for battery charging.

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## System Status

System status displays show power, network status, panel temperature and time-of-day clock. The power display shows battery charge level and RF module voltage. Network status shows RF module type and link status.

Press <> for  
SYSTEM Status



BAT V33  
2.87 3.32 Vdc

DATA

DEV RSSI LINK  
C0 ---- YES

DATA

TMP MAX MIN  
73 108 -5

DATA

DATE 04/11/08  
TIME 13:29:57

Temperature display shows current panel temperature and the historical high and low temperatures since the last time the unit was power cycled. The date/time clock shows current date and 24-hour time-of-day

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## Switch Input Display

J5 switch inputs (DI) will sense up to 30 Vdc logic signals or dry contact switch actions. Switch input terminals share a common ground. Switch input (DI) status display shows the OFF/ON status of both J5 I/O switch inputs.

DATA

INPUT SW1 SW2  
Status OFF OFF

ON = Active. OFF = Not Active.

## Switch Output Displays

J5 switch outputs (DO) are robust power switches capable of switching loads up to 20 Vdc at 2 Amperes and act as standard MurphyGAGE™ outputs. Switch outputs have a common ground and should be used to "ground" the load connected to the switch terminal.

DATA

OUTPUT SW1 SW2  
Status OFF OFF

ON = Active. OFF = Not Active.

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## RS-232 Serial Port

The RS-232 serial port uses an 8-Pin RJ-45 female jack for connection. The default RS-232 port is a DTE (Data Terminal Equipment) configuration with the following serial port parameters:

Baud Rate	9.6k, 19.2k or 38.4k (default)
Parity	None
Data Bits	8
Stop Bits	1
Flow Control	None

RJ-45 Plug	DB-9 Plug	DB-9 Plug
DTE Male	DCE Female	DTE Male
=====	=====	=====
1 – DSR	6 – DSR	6 – DSR
2 – ***	1 – DCD	1 – DCD
3 – DTR	4 – DTR	4 – DTR
4 – GND	5 – GND	5 – GND
5 – RXD	3 – TXD	2 – RXD
6 – TXD	2 – RXD	3 – TXD
7 – CTS	7 – RTS	8 – CTS
8 – RTS	8 – CTS	7 – RTS

The RJ-45 plug's DSR (1) and DTR (3) pins are tied together internally.

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## Accessories

Part Number	Accessory Description
9203-2002110	Pipe Mounting Kit 2-1/4 U-Bolt with extra 5/16" nuts . Uses universal mounting plate.
2503-3231HEY	Watertight Bushing. ½ NPT, Black Nylon. Uses 2503-8463HEY nut.
9203-2032150	Power Jack Assembly. 2.5mm Receptacle. Complete wired assembly.
4160-2032120	Universal Mounting Bracket. Black Zinc Plated #16 GA Steel. 2" Pipe or motor valve mount.
1980-2032400	Wireless XBee Kit. Maxstream 2.4 GHz Module. 300 ft. (100m) Line of Sight range.
1980-2032401	Wireless Xbee-Pro Kit. Maxstream 2.4 GHz Module. 4000 ft. (1km) Line of Sight range.
9200-0501200	Ext. 6 W Solar Panel w/ stand. 5.0 Vdc @ 1200 mA charging. 6 ft. Power Jack cable provided.

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