

DATA SHEET

EME800A-US_EME800A-EU

ALERTWERKS AW3000

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM



BLACK BOX®

OVERVIEW

AW3000 DATA SHEET

INTRODUCTION

AlertWerks™ AW3000 (AW3000) is an all-in-one-box LoRaWAN® solution for wireless IoT applications. More than a gateway that is uploading your important data to any cloud service, it is a central unit providing full control with just a web interface.

AW3000 is open platform, allowing you to use any LoRaWAN 1.0.x sensor. It has a simple connection (join) procedure to get LoRaWAN data from your sensor flowing into the system. It offers rich features to set up virtual sensors, actions, and notifications. Multiple dashboards can be set up and used.

LoRaWAN works on sub 1GHz frequencies using multiple modern technologies to transmit data wirelessly on a kilometer scale. It offers end-to-end encryption and security, so no one can see your data or steal your sensor.

AW3000 is a Linux device with a HDMI Output and USB Ports. It can connect to a touch monitor to visualize data directly from the unit. There is no command line editing or Linux knowledge necessary, since AW3000 boots directly into a graphical user interface.

AW3000 gives you highly customizable dashboards that can include a variety of options including world maps and floor plans. Interactivity and drill down functionality are possible.

All data is stored in a SQL database. Your IT department will love AW3000.

PRODUCT IMAGES

AW3000 DATA SHEET



EME800A



EME800A Box Contents

SPECIFICATIONS

AW3000 DATA SHEET

SPECIFICATIONS FOR EME800A	
FEATURE	SPECIFICATION
DIMENSIONS (H X W X D)	1.3" x 2.4" x 3.9" (32 x 62 x 99 mm)
WEIGHT	6.3 oz. (180g)
RATING	IP20, 14 to 131°F (-10 to +55°C)
POWER	Micro USB (20W) or PoE 802.3at
CONNECTORS	(1) HDMI; (4) USB (1) Audio Out (1) RJ-45 (1) Antenna
CPU/RAM	Quad 1, 4GHz ARM Cortex A53, 1GB RAM
OS	Linux 5.10.60-v7+
GNU/MIT SOFTWARE	MariaDB, PHP, Apache, SNMPD 5.7.3, gcc, Semtech libloragw
BROWSER	Firefox V90+



PRODUCT INFORMATION

AW3000 DATA SHEET

Physical Sensors:

Any LoRaWAN® sensor following version 1.0.x can be used. For the join process, the AppKey is needed. Class A and Class C sensors are supported. A payload decoding algorithm is selected for the sensor by selecting the sensor's vendor/part number. Black Box carries a list of certified and tested sensors. For other sensors, users need to integrate a payload algorithm (PHP).

The number of physical sensors that can be connected is determined by system settings. Using low intervals minimizes the lifetime of sensor batteries and also reduces the number of joinable sensors.

Intervals below 1 minute:	maximum physical sensors:	10
Intervals 1-10 minutes:	maximum physical sensors:	25+
Intervals 10-30 minutes:	maximum physical sensors:	50+
Intervals 30+ minutes:	maximum physical sensors:	100+

NOTE: For many sensors, the default is between 20 and 30 minutes. Not all sensor vendors allow changing the time interval. Sensors performing People Count or Motion detection mainly transmit when an event occurs. Also note that many sensors transmit multiple values which appear as datapoints. You may select the data points to be displayed when configuring the unit.

Virtual Sensors:

Virtual sensors can obtain any data from IP/IT systems by using SNMP GET. Other virtual sensor methods are PING, LATENCY, WGET, SQL, MATH, MULTIMATH, and COMBINE. More methods may be added in future software releases.

The number of configurable virtual sensors is determined by system settings. Using low intervals or using incorrect settings puts more load on the CPU. The unit measures and takes necessary action to keep up to 25 virtual sensors alive.

Actions/Notifications:

User can configure actions. These are executed once a sensor is beyond, below, or exactly at a certain value for a given time period, determined by system configuration. Configurable action methods are SNMP SET, SNMP TRAP, PLAY ALARM, CHANGE INTERVAL, CHANGE DASHBOARD COLOR, and SENDMAIL (SMTP).

More action methods may be added in future software releases.

WHAT'S INCLUDED

- (1) Wireless AW3000
- (1) Antenna
- (2) Mounting Plates
- (4) Screws



