WIRELESS DATA LOGGERS

FEATURES

- Compatible to Aeron and Davis® make sensors
- Selectable Logging and Update rates
- Communication - RS232 Serial & RS485 MODBU RTU
- Low Power with Rechargeable Batteries
- Industrial Grade - IP65 Sealed
- Device configuration over SMS & GUI
- Over the Air Firmware Update
- Desktop & Mobile App

ACE DLG88

APPLICATIONS

- Agricultural Weather Stations
- Meteorological Weather Monitoring
- Smart Agriculture
- Remote Sensing
- Process Monitoring
- Renewable Energy Monitoring

DESCRIPTION

DLG88 is a rugged outdoor data logger from the ACE family of loggers for agricultural and meteorological applications. DLG88 data logger connects with a variety of sensors for Agri/Met, takes periodic measurements, processes the acquired data, and stores in onboard SD card memory. The acquired data is simultaneously communicated to the secured cloud server using an integrated GSM modem for real-time monitoring.

DLG88 consumes very low power allowing it to operate for weeks without charging on it's onboard 4.4 Ah battery. The battery can be charged with a 10 Watt solar panel, eliminating the need for an AC power supply.

The DLG88 offers data storage memory of 8 GB sufficient to store data for years. It also features USB connectivity which can be used for retrieval of SD card data from laptop or tablet. The LCD display and keypad make configuration and device health assessment very easy on the site. Users can subscribe to Aeron's cloud portal for remotely accessing data.

Datasheet Ver. 2.1.0

TECHNICAL SPECIFICATIONS

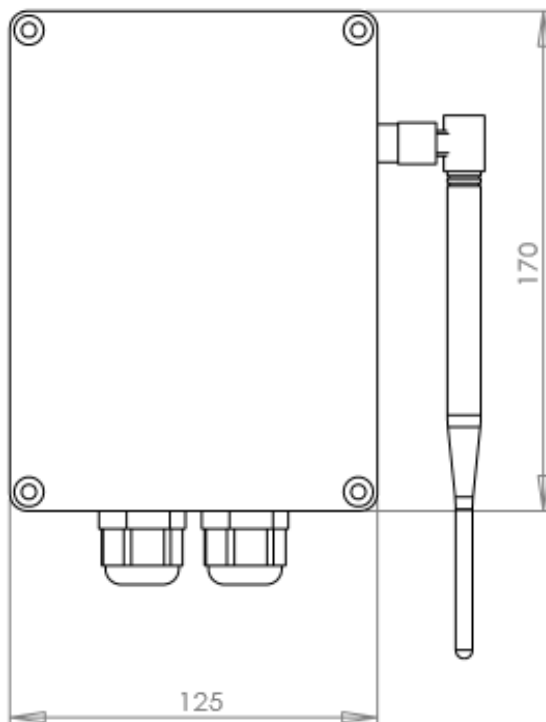| Parameter Name	Parameter Value
	ACE
	DLG88
Analog I/Ps	
Channels	Davis® Anemometer Aeron / Davis® Air Temperature Humidity Davis® Rain Bucket Davis® Solar Radiation Aeron / Davis® Leaf Wetness Vegetronix Soil Moisture Soil Temperature (PT100)
On-board Sensors #	Barometric Pressure
Analog to Digital Converter (ADC)	
Resolution	12 bit
Accuracy	±0.1% of FS
Type	Sigma - Delta
Sampling Rate	Upto 10 Hz
Parameters	
Simultaneous Parameters	up to 176 parameters - including sensor and calculated parameters
Data Rate	5 minutes (min) to 24 hours (max)
Serial I/P	RS232
Communication	
Network Type	Quad-Band GSM
Frequency Band	850 / 900 / 1800 /1 900 MHz
Data Rate	85.6 Kbps upload and 42.8 Kbps download
Data Security	AES (128 bit)
Interfaces	RS232 Serial & RS485 MODBUS RTU
Micro-processor	32 bit
Display	Graphic LCD Display 128 x 64 resolution
Indicators	LED - Power LED - Network Health
Keypad	3 button Keypad
Date & Time	RTC with backup battery (replaceable) Accuracy: 10 ppm/˚C
Time Synchronization	Server

- refer ordering information

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TECHNICAL SPECIFICATIONS

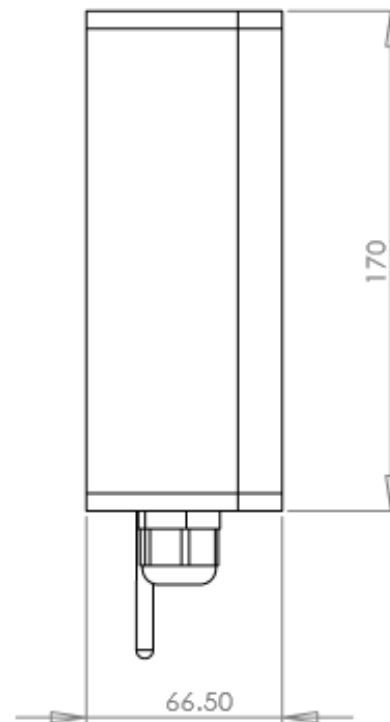| STORAGE	
Internal Flash	2 MB
SD Card Memory	8 GB Micro SD
ELECTRICAL	
Voltage I/P	+9 to +28 V DC
Charge Current	< 100 mA (in operation) < 10 mA (in power down mode)
Batteries	4.4 Ah Rechargeable Li-ion batteries
ENVIRONMENT	
Operating Temperature	-20° C to +70 °C
Storage Temperature	-40 °C to +80 °C
Protection	IP65
Housing	ABS UV Protected
Dimensions	125 mm (W) x 170 mm (L) x 66.5 mm (B)
Weight	654 gm

MECHANICAL DIMENSIONS

All dimensions in mm

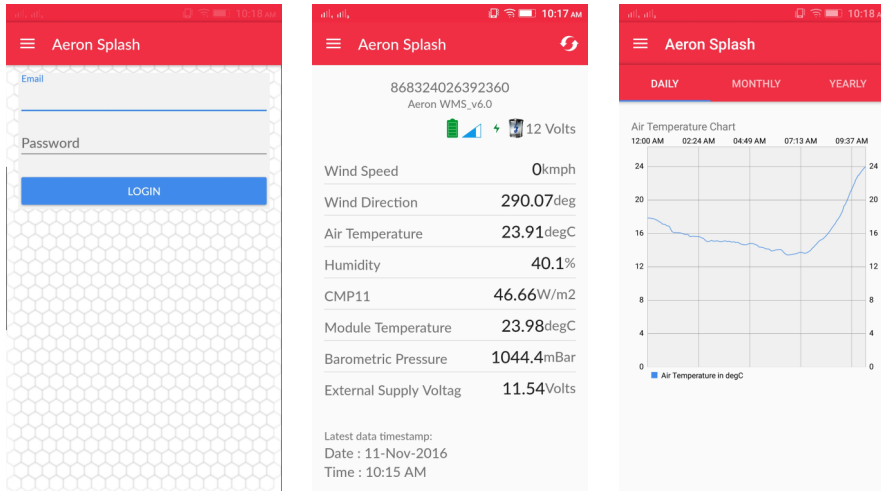**Front View**

Side View

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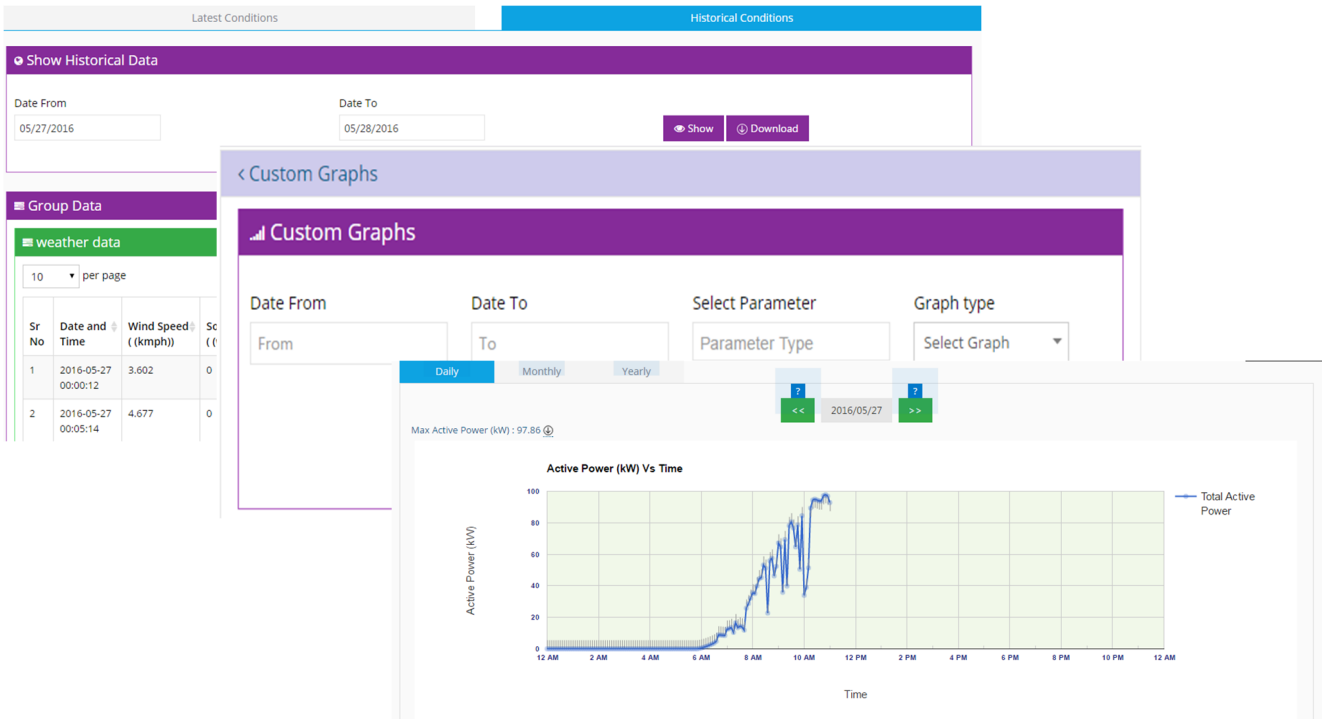## Web Portal, Desktop and Android Application

A web portal application and a user friendly Android Application is available with DLG88. Desktop application allows configuration settings and data retrieval. The Android app allows data viewing only.

Note: The Android app is available ONLY for customers who use Aeron's Web Services.

Android Application

Web Portal

ORDERING INFORMATION

ACE - DLG88 - YY

00 - without Barometric Sensor (Product Code: 22001)
01 - onboard Barometric Sensor (Product Code: 22002)