

## WIRELESS DATA LOGGERS

### FEATURES

- Compatible to Aeron and Davis<sup>®</sup> 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

### APPLICATIONS

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

### DESCRIPTION

ACE is a family of universal outdoor dataloggers for agricultural and meteorological applications. ACE dataloggers can take periodic measurements from a diverse set of Agri/Met sensors and store in onboard SD card memory. The dataloggers have an integrated GSM modem to communicate sensor data securely to a cloud server for real-time monitoring.

DLG88 is the base model of the ACE family which can operate for extended hours without charging owing to its low power consumption. Backup battery can be charged with a 10 Watt solar panel, eliminating the need for an AC power supply. DLG88 is compatible with Aeron and Davis<sup>®</sup> make sensors.

The DLG88 datalogger has an SD card slot for local data storage expandable up to 32GB. It also features USB connectivity which can be used for retrieval of SD card data from laptop or tablet. LCD display and keypad makes configuration easy even on site. Users can subscribe to Aeron's web portal for remotely accessing data.

**ACE DLG88**





### TECHNICAL SPECIFICATIONS

| Parameter Name                           | Parameter Value   |
|--|---|
|  | ACE   |
|  | DLG88   |
| <b>Analog I/Ps</b>                       |   |
| Channels                                 | Davis® Anemometer<br>Aeron / Davis® Air Temperature Humidity<br>Davis® Rain Bucket<br>Davis® Solar Radiation<br>Aeron / Davis® Leaf Wetness<br>Vegetronix Soil Moisture<br>Soil Temperature (PT100) |
| On-board Sensors #                       | Barometric Pressure   |
| <b>Analog to Digital Converter (ADC)</b> |   |
| Resolution                               | 12 bit  |
| Accuracy                                 | ±0.1% of FS   |
| Type                                     | Sigma - Delta   |
| Sampling Rate                            | Upto 10 Hz  |
| <b>Parameters</b>                        |   |
| Simultaneous Parameters                  | up to 176 parameters - including sensor and calculated parameters   |
| Data Rate                                | 5 minutes (min) to 24 hours (max)   |
| Serial I/P                               | RS232   |
| <b>Communication</b>                     |   |
| Network Type                             | Quad-Band GSM   |
| Frequency Band                           | 850/900/1800/1900 MHz   |
| Data Rate                                | 85.6 Kbps upload and 42.8Kbps download  |
| Data Security                            | AES (128 bit)   |
| Interfaces                               | RS232 Serial &<br>RS485 MODBUS RTU  |
| Micro-processor                          | 32 bit  |
| Display                                  | Graphic LCD Display<br>128 x 64 resolution  |
| Indicators                               | LED - Power<br>LED - Network Health   |
| Keypad                                   | 3 button Keypad   |
| Date & Time                              | RTC with backup battery (replaceable)<br>Accuracy: 10 ppm/°C  |
| Time Synchronization                     | Server  |

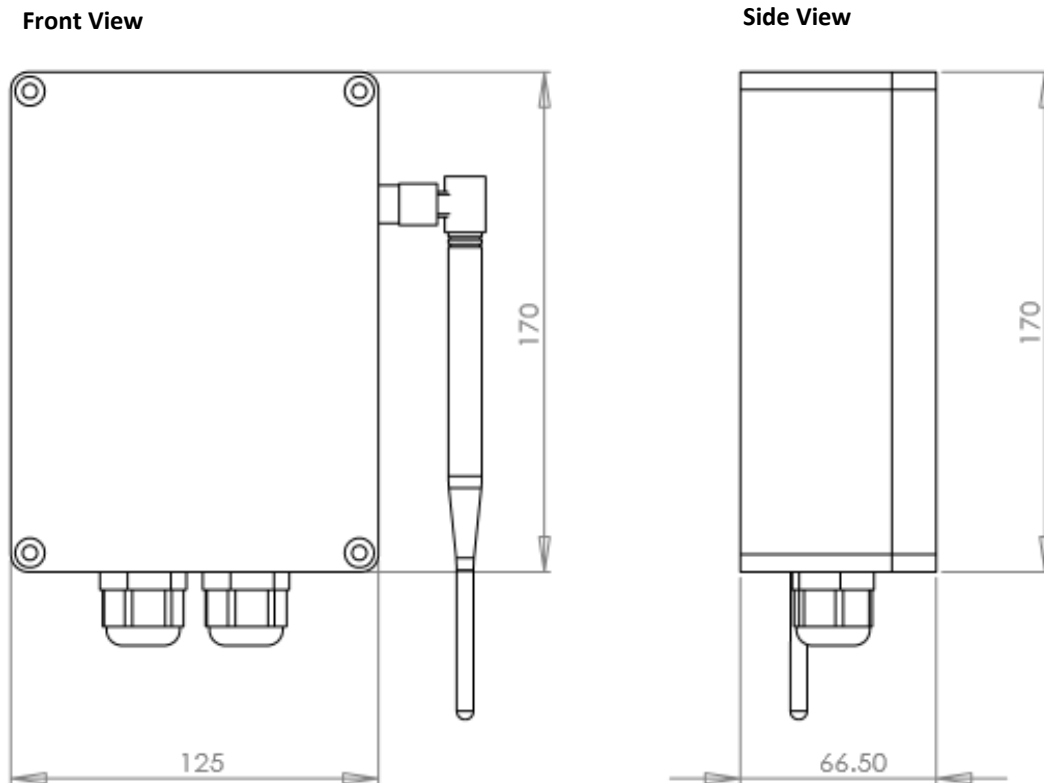
# - refer ordering information

## TECHNICAL SPECIFICATIONS

| STORAGE               |   |
|-----------------------|---|
| Internal Flash        | 2 MB  |
| External Flash        | 8 GB Micro SD (default)<br>Expandable up to 32 GB       |
| ELECTRICAL            |   |
| Voltage I/P           | +9 to +28 VDC   |
| Charge Current        | < 100 mA (in operation)<br>< 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            | 125mm (W) x 170mm (L) x 66.5mm (B)                      |
| Weight                | 654 gms   |

## MECHANICAL DIMENSIONS

All dimensions in mm



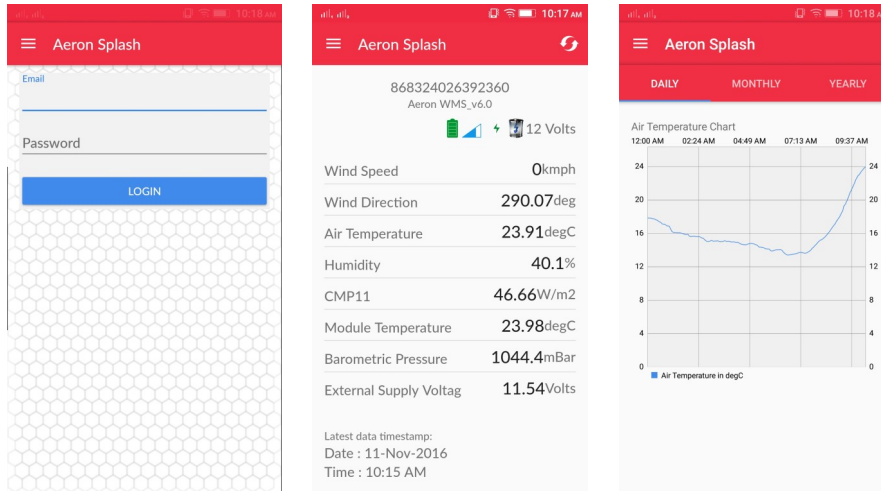
## Web Portal, Desktop and Android Application



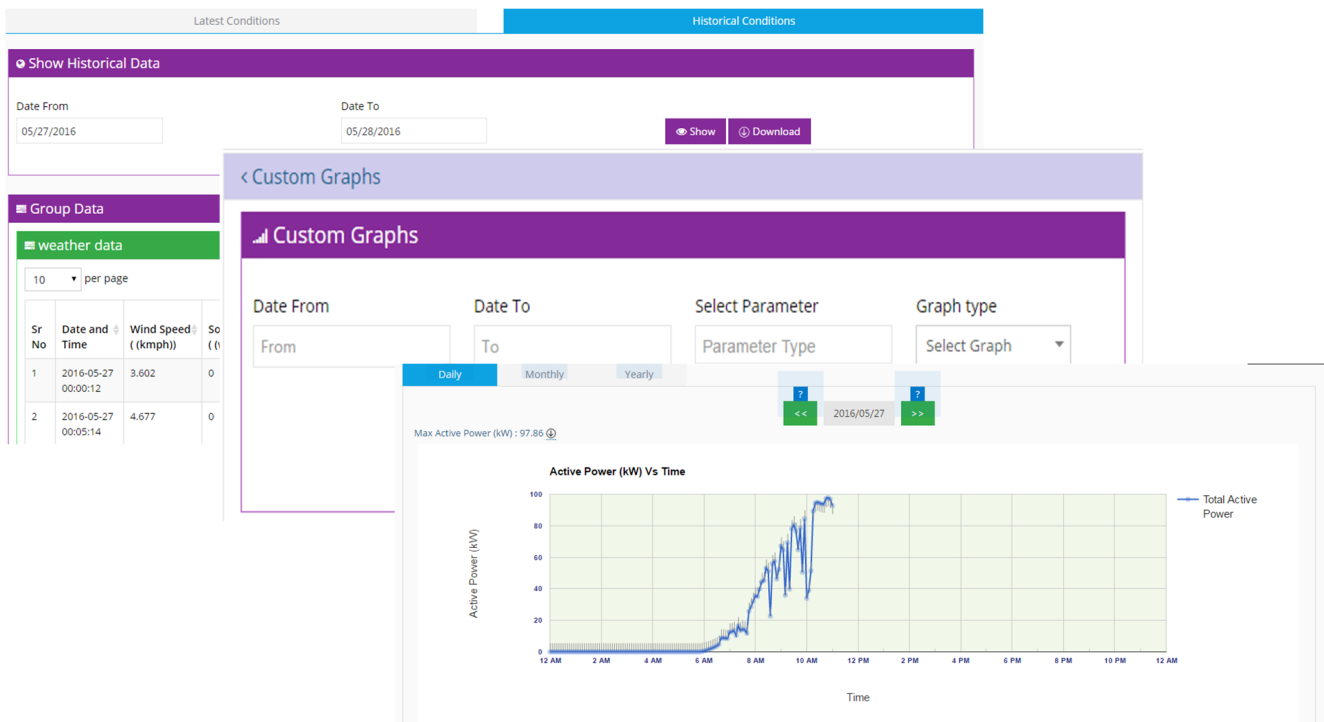
A web portal application and a user friendly Android Application is available with DLG88. Desktop application allows configuration settings and data retrieval. The Android app allows data viewing only.

*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)**