

# Lafuma<sup>®</sup>

Automatic Weather monitoring system



**Lafuma<sup>®</sup>**  
An Integrated Metering Solution



# Automatic Weather monitoring system



QES-WMS-01 Weather Stations are highly sophisticated monitoring & logging of intrinsic weather conditions like temperature, barometric pressure, wind direction, wind speed, wind chill and other optional parameters according to your requirements.

Application areas include agriculture, hydrology, ecology and meteorology. For any sort of customized application, Itechflow Pvt Ltd can give assistance to select the best blend of sensors, data logger and accessories accordingly.

## Product Features



### **Solar panel with Battery**

Compatible to charge internal battery using solar power.



### **Compact**

Compact and lightweight system suitable for installation at a height of more than 3m



### **Weather Resistant**

IP67 Grade (certified) enclosure for endurance against harsh weather conditions.



### **Real-Time Data**

Real-time data transfer with customizable intervals and ongoing monitoring.



### **Network**

Supports a wide range of connectivity options like GSM / GPRS / Wi-Fi / Ethernet / Modbus.



### **Internal Storage**

Internal data storage capacity of up to 8GB or 5 year data storage

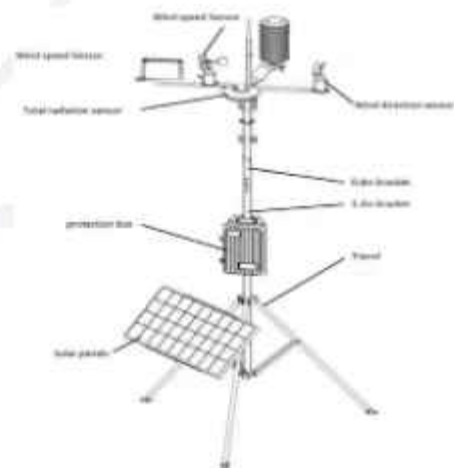




# Main Specifications

|                            |                 |                         |
|----------------------------|-----------------|-------------------------|
| <b>Wind speed</b>          | Measuring Range | 0 ~ 70m/s               |
|                            | Accuracy        | $\pm(0.3+0.03V)$ m/s    |
|                            | Resolution      | 0.1m/s                  |
| <b>Temperature</b>         | Measuring Range | -50 ~ 65°C              |
|                            | Accuracy        | 0.1°C                   |
|                            | Resolution      | $\pm 0.1^\circ\text{C}$ |
| <b>Wind direction</b>      | Measuring Range | 0 ~ 360°                |
|                            | Accuracy        | $\pm 3^\circ$           |
|                            | Resolution      | $\leq 0.5\text{m/s}$    |
| <b>Relative Humidity</b>   | Measuring Range | 0 ~ 100%RH              |
|                            | Accuracy        | 0.5%RH                  |
|                            | Resolution      | $\pm 1\%RH$             |
| <b>Rain Fall</b>           | Measuring Range | 0-4mm/min               |
|                            | Accuracy        | $\pm 4\%$               |
|                            | Resolution      | 0.2mm                   |
| <b>Barometric pressure</b> | Measuring Range | 10-1100hpa              |
|                            | Accuracy        | $\pm 0.3\text{hpa}$     |
|                            | Resolution      | Resolution 0.1hpa       |
| <b>Solar Radiation</b>     | Measuring Range | 1-1600W/m <sup>2</sup>  |
|                            | Accuracy        | $\pm 5\%$               |
|                            | Resolution      | 1W/m <sup>2</sup>       |

## Sensor size



| Item     | Connectivity | Specification        |
|----------|--------------|----------------------|
| Wireless | GSM          | Global 2G / 3G       |
|          | Wi-Fi        | AP & Station Mode    |
| Wired    | Ethernet     | Static Configuration |
|          | RS-485       | RS-485 RTU           |



## Mechanical

Material ABS, SS316, Mild-steel

Certifications CE, FCC, TUV, RoHS

Size 280mm (H) x 180mm (W) x 120mm (D)

Weight 7.6 Kg (instrument weight)



## Electrical

Power Input Options

AC: External 110-240V AC, 50-60Hz

DC: Uninterrupted 24V DC, 2 Ampere 60 Watt  
24V Solar Panel

Battery Backup Time

UPTO 2DAYS



## Cloud

Deployed on AWS with the URL: qenggonline.com

Unique user id and password provided by QESPL for data visualization. Report generation, user profile, and device management are some feature of QESPL dashboard.



## Environmental

Operating Temperature -20 °C to 60 °C

Operating Humidity 0-93% RH

Recommended Humidity 15-90% RH

## Tools and Material needed for Installation

In addition to the enclosed components, you will need the following tools and materials to complete the installation. Please be sure you have everything you need before proceeding with the installation.

- Cable clips or weather resistant cable ties—with screw holes or other means for mounting.
- Small and medium-sized screwdrivers.
- Hand-held magnetic compass or local area map.
- Hammer.

## Optional Tools and Materials

- 12-volt | 7.2Ah lead acid battery to be used as backup power supply.
- Carpenter's level to level the anemometer base.
- Electric drill with 3/16" (4.8mm) and/or 29(0.136" or 3.5mm) drill bits to drill pilot holes.
- Electric tape if mounting the anemometer on metal mast or pipe.
- 2 stainless steel hose clamps if mounting the anemometer on pipe with Diameter Greater than 1 1/4" (32 mm).
- Standard switch box if mounting the console with the wires running inside the Wall.
- Medium Phillips screwdriver if mounting the console on a wall.



## Optional Accessories

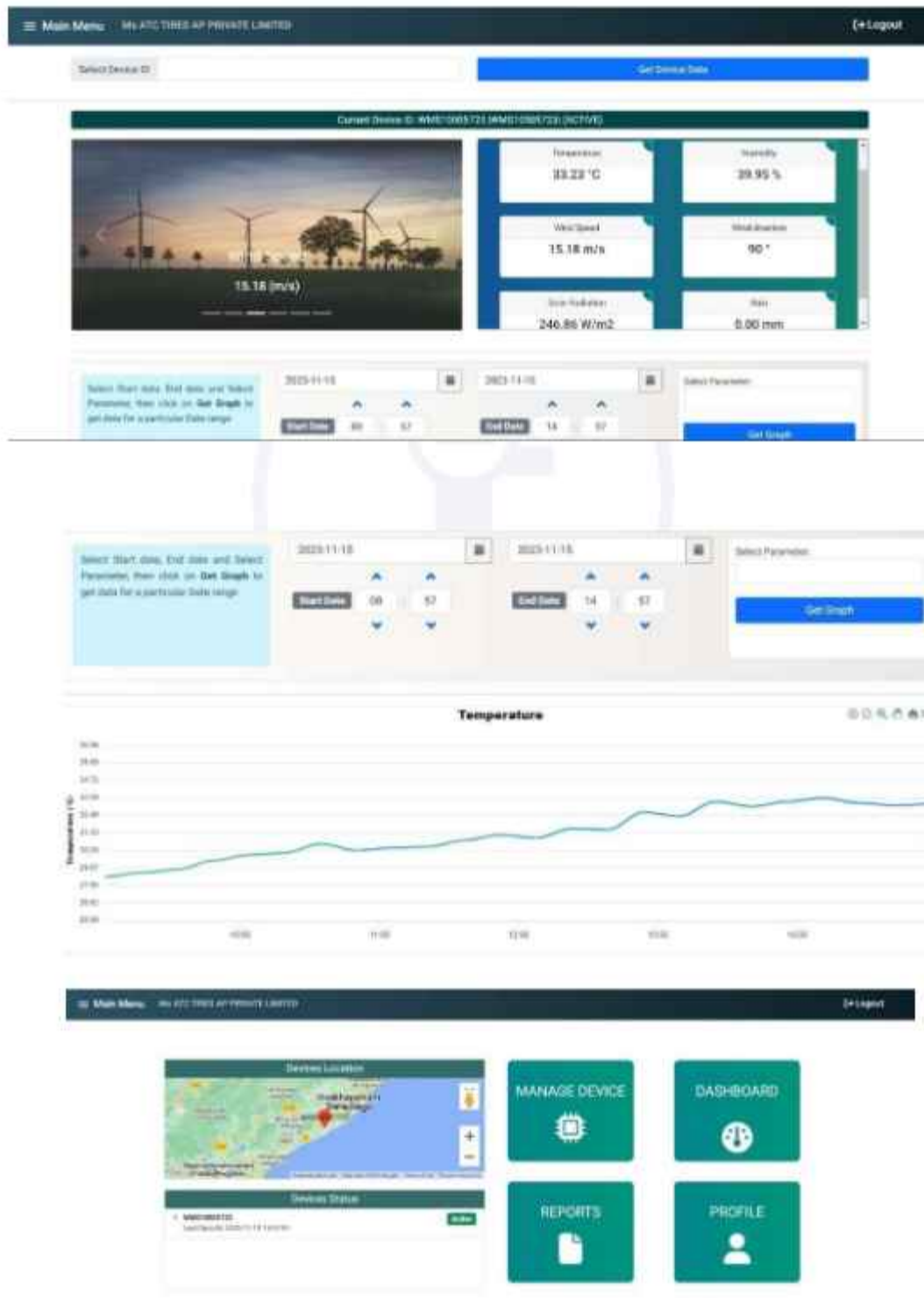
The following accessories are designed for use with the Weather Station Lafuma-WSU-623.

- The standard external temperature sensor, allows you to measure outside humidity addition to temperature.
- Rain Collector enables you to measure daily and accumulated rainfall. Separate models measure rainfall in either 0.01 inch or 0.2 mm increments.
- Weather Software which integrated in the mother board accesses the GSM modem built in, to log the data through Data Logger and generates reports and graphical displays of your weather data in the server using API protocol.
- Sensor Mounting Arm, A single-location mounting option for all your sensors. Includes positioning for anemometer, external temperature or temperature/humidity sensor (with Radiation Shield), and Rain Collector (with Rain Collector Shelf).
- Radiation Shield protects the temperature or temperature/humidity sensor from the sun and the effects of radiated and reflected heat. Increases the life of the sensor and the accuracy of the readings.
- IP65 under IEC529 rating Ingress protection Junction Box-Enclosure Provides upgraded protection against radio frequency interference (RFI), electrostatic discharges (ESD), Water proofed and power surges that can come through sensor wires.
- Extension Cable Extends cable length for total cable runs of 80-140feet (24-42m) sensor to console. Order the 4-Conductor Extension Cable [in lengths of 40feet (12m) or 100feet (30 m)] for use with the anemometer, external temperature sensor, Rain Collector. Order the 6-Conductor Extension Cable [in lengths of 40 feet (12 m) only] for use with the External Temperature/Humidity Sensor.
- Junction Box Cables Order a Standard 8-Conductor Cable for greater flexibility in the Placement of your console. Comes in lengths of 25, 50, and 100feet (7.6, 15.2, and 30.4m).

## Using Cloud data Facility

Every Analyzer having its unique "USER ID" & "PASSWORD" you can simply login to [onlineqengg.com](http://onlineqengg.com) feed product credential and enjoys cloud facility.

Sometime user need to integrate other make RTU for online. When its need so user can communicate with the help of RS485 (datasheet will be provided with our helpline no's or websites) for assistant feel free to team Lafuma PL







**CONTACT US**

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