PRODUCT OVERVIEW

# Apex Automated Weather Station

## Precision without compromise

AEM's Apex Automated Weather Station delivers the precision, reliability, and durability essential for the toughest weather monitoring challenges. From localized climate research to large-scale weather networks, our systems provide high-quality data to power accurate forecasts, improve climate analysis, and ensure compatibility for global data sharing and collaboration. Designed to meet strict WMO and ICAO standards, the Apex Weather Station is ideal for critical meteorological and aviation applications.

### Key benefits

Make better decisions with precise, WMO- and ICAO-compliant data that meets the strict tolerances required for critical applications.

Seamlessly share data with regional and global partners, enabling collaboration for more coordinated monitoring and forecasting.

Depend on continuous, accurate data from a weather station designed for high performance and low upkeep, even in the toughest conditions.

Maximize your investment with a future-proof system that's scalable and compliant with evolving standards.

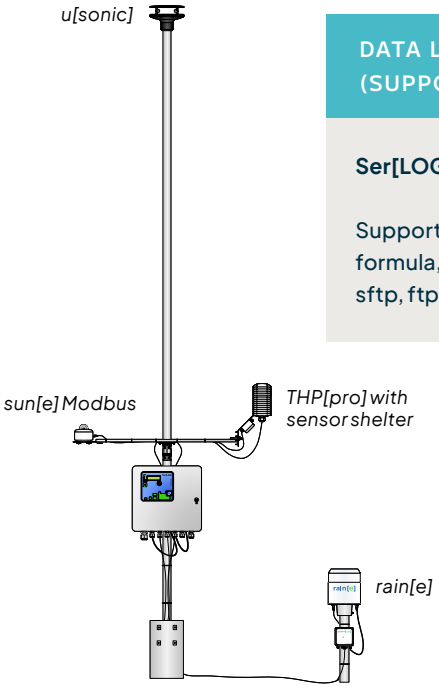


### Who it's for

- National Meteorological and Hydrological Services (NMHS): Build or modernize weather networks with trusted, WMO-compliant weather stations.
- Regional mesonets and research institutions: Improve local weather forecasts and climate monitoring with high-quality data.
- Private sector (Energy, Aviation, Utilities): Optimize operations, ensure safety, and improve decision-making with the most precise weather data.

# Apex Automated Weather Station components and specifications

| SENSORS | SPECIFICATIONS |
|---|---|
| **u[sonic]** | • Wind direction: < 2° (> 1 m/s) RMSE<br>• Wind speed: ± 0.2 m/s RMSE (v < 10 m/s) ; ± 2 % RMSE (10 m/s < v < 65 m/s)<br>• Measuring frequency up to 120Hz |
| **rain[e]** | • ± 0.1 mm or 1 % at < 6 mm/min; ± 2 % at ≥ 6 mm/min<br>• Load cell accuracy: 10mg equal to 0,0005mm |
| **sun[e]** | • Secondary standard pyranometer |
| **THP[pro]** | • Accuracy air temperature: ± 0.1 K (0…60 °C); ± 0.2 K (-40…0 °C); ± 0.2 K (60…70 °C<br>• Accuracy relative humidity: typically at 25 ± 1 % (20...70 %) r. h. °C: ± 1 % (20...70 %) r. h.<br>• Accuracy barometric pressure: typically 0.15 hPa (700... 1100 hPa)<br>• 3 independent pressure sensors |



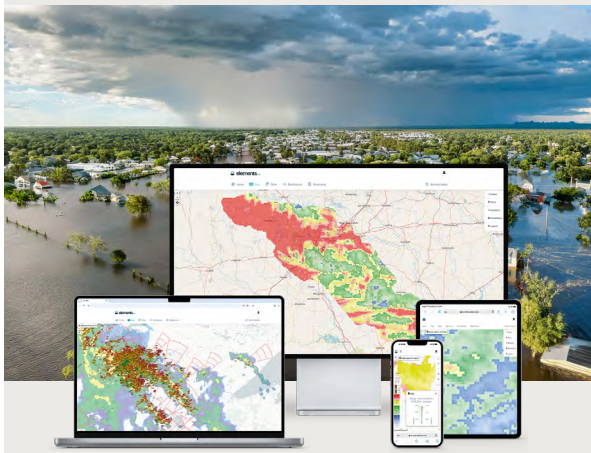

## DATA LOGGER AND COMMUNICATION (SUPPORT TLS 1.3)

**Ser[LOG] with 4G modem**

Support dual modem, dual server, virtual formula, etc. Modbus, Ethernet, RS485, sftp, ftps, https, mobile and SMS option

## AEM difference

- Complete weather monitoring solutions designed for today's demands and tomorrow's evolving needs – from network design and installation to software and maintenance.
- Trusted by government agencies, meteorological services, and communities worldwide, with thousands of systems deployed for severe weather, wildfire, and flood risk management.
- **AEM Elements® 360** unifies and shares data in one powerful decision support application, simplifying collaboration, improving response and keeping communities safe.



**READY TO POWER YOUR WEATHER DATA WITH PRECISION?**

Contact us today at **info@aem.eco** to discover how the Apex Automated Weather Station can enhance your early warning systems, improve climate research, and support data-driven decisions.