



MESOTECH

I N T E R N A T I O N A L



AIRPORT WEATHER ADVISOR®

HELIDECK AWOS SYSTEM

CAP 437 Compliant Environmental
Monitoring Solution

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Precision Monitoring for Helidecks

CAP 437 Fully Compliant	25-40% Lower Cost vs Other Manufacturers
Multi-Manufacturer Sensors	Proven Military Heritage
Real-time Motion Monitoring	Personal Engineering Support



CAP 437 ENVIRONMENTAL MONITORING REQUIREMENTS

Our system fully complies with all CAP 437 Appendix E requirements for meteorological information from offshore installations

PARAMETER	CAP 437 REQUIREMENT	MESOTECH SOLUTION	PERFORMANCE
Wind Speed/Direction	±2% accuracy, Primary + Backup	FT7 series, Ultrasonic	±2% (16-40m/s), up to 90 m/s range
Temperature	±1.0°C (-25°C to +50°C)	Rotronic digital Temp/RH sensor	±0.1°C accuracy
Relative Humidity	±1.0°C dew point accuracy	Rotronic digital Temp/RH sensor	±0.8% RH, 0-100% range
Barometric Pressure	±0.3 hPa minimum	Silicon Digital Baometer (dual or triple cell)	±0.03% FS (0.3 hPa)
Visibility	Present Weather detection	CS125	10 m to 99 km range
Cloud Height	Multiple layer detection	CBME120 LIDAR ceilometer	up to 5 layers, 12,000 m range

HELIDECK MONITORING SYSTEM (HMS) REPEATER LIGHTS

CAP 437 compliant visual status indication system providing real-time helideck operational status to pilots and deck crew.

SYSTEM ARCHITECTURE

FIELDSENSORS → DATA COLLECTION PLATFORM → CENTRAL PROCESSING

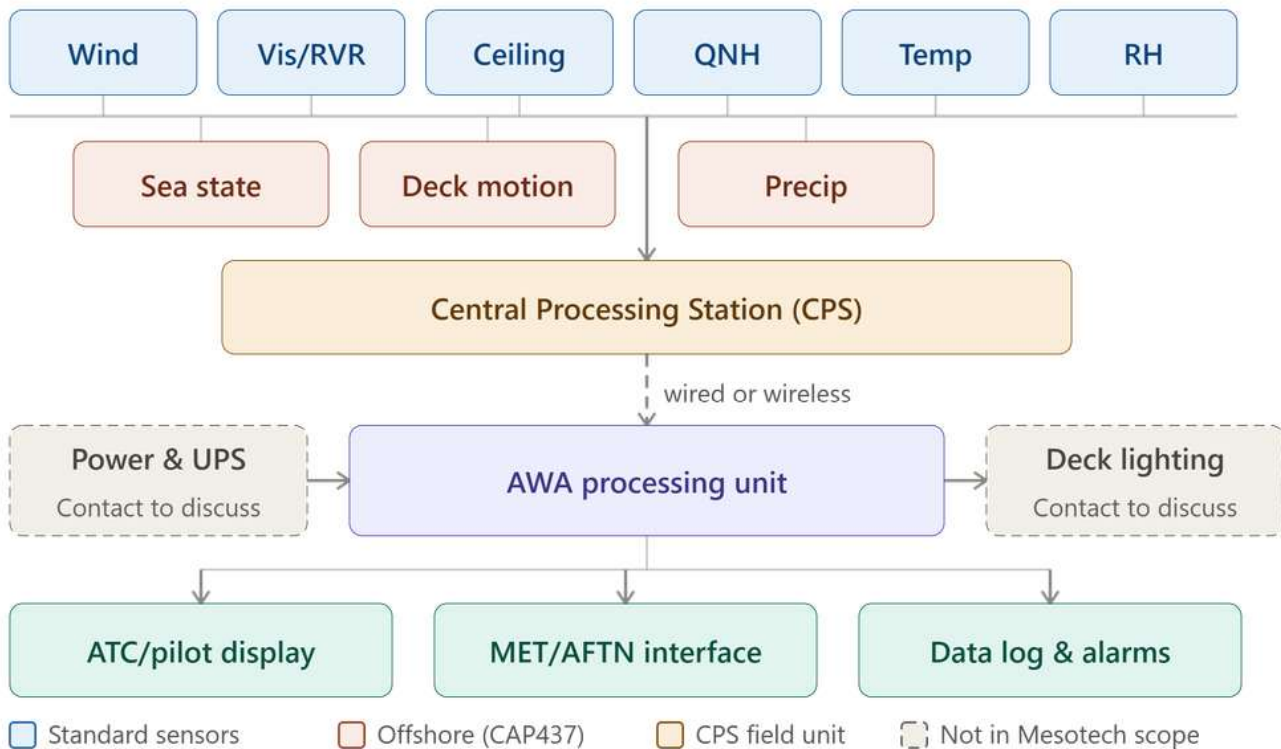
- ✓ Multi-manufacturer Sensors
- ✓ Real-time processing
- ✓ METAR generation
- ✓ Quality control checks
- ✓ Report distribution
- ✓ User interface
- ✓ Local data storage
- ✓ Voice synthesis
- ✓ Communication interface
- ✓ Historical data
- ✓ Self-diagnostics

COMMUNICATION OPTIONS:

VHF Radio, Telephone (up to 4 lines), Ethernet/IP, UHF Data Radio, other.

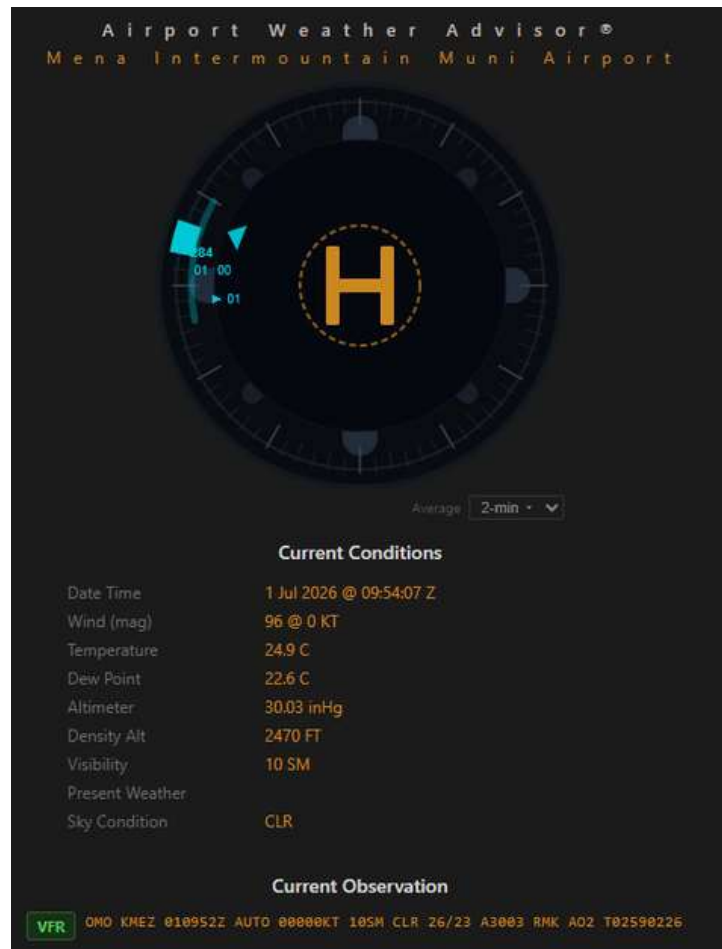
HMS REPEATER LIGHTS:

Blue (Safe), Amber (Caution), Red (Danger), Motion Status Display



WHY CHOOSE MESOTECH OVER OTHER MANUFACTURERS?

FEATURE	MESOTECH ADVANTAGE	OTHER MANUFACTURERS
Cost	25-40% lower total cost	Premium pricing
Flexibility	Multi-manufacturer sensors	Proprietary ecosystem only
Service	Direct engineer access	Corporate support structure
Experience	30+ years, 220+ military systems	Strong
Deployment	Rapid, MIL-STD connectors	Standard installation
Customization	Tailored to specific needs	Standard configurations



AIRPORT WEATHER ADVISOR™

The Airport Weather Advisor® FAA Certified and ICAO compliant System meets the requirements of Annex 3 to the Convention on International Civil Aviation (ICAO) for automated meteorological observing systems. This comprehensive system provides accurate, reliable weather data essential for international aviation operations.

The system is designed to support international airports with Category I, II, and III instrument approach and landing operations, providing real-time meteorological parameters affecting landing and take-off operations in compliance with ICAO standards.

ABOUT MESOTECH

Based in Sacramento, California, Mesotech originally supplied small meteorological stations to various industries. With over 30 years of experience, we have established a global client base, including hundreds of airports worldwide. Despite our success, we still prioritize personal attention and customer service, which is the foundation of our reputation.

Our weather systems have been installed globally, and have been in continuous use by the US Air Force since 2001. As a prime contractor, we provide engineering, helpdesk, and logistics support for 220+ USAF/Army systems worldwide and were recognized as the Region IX Small Business Prime Contractor of the Year in 2014. **Leveraging our extensive expertise from military operations, we are proud to offer high-caliber weather systems to any airport.**

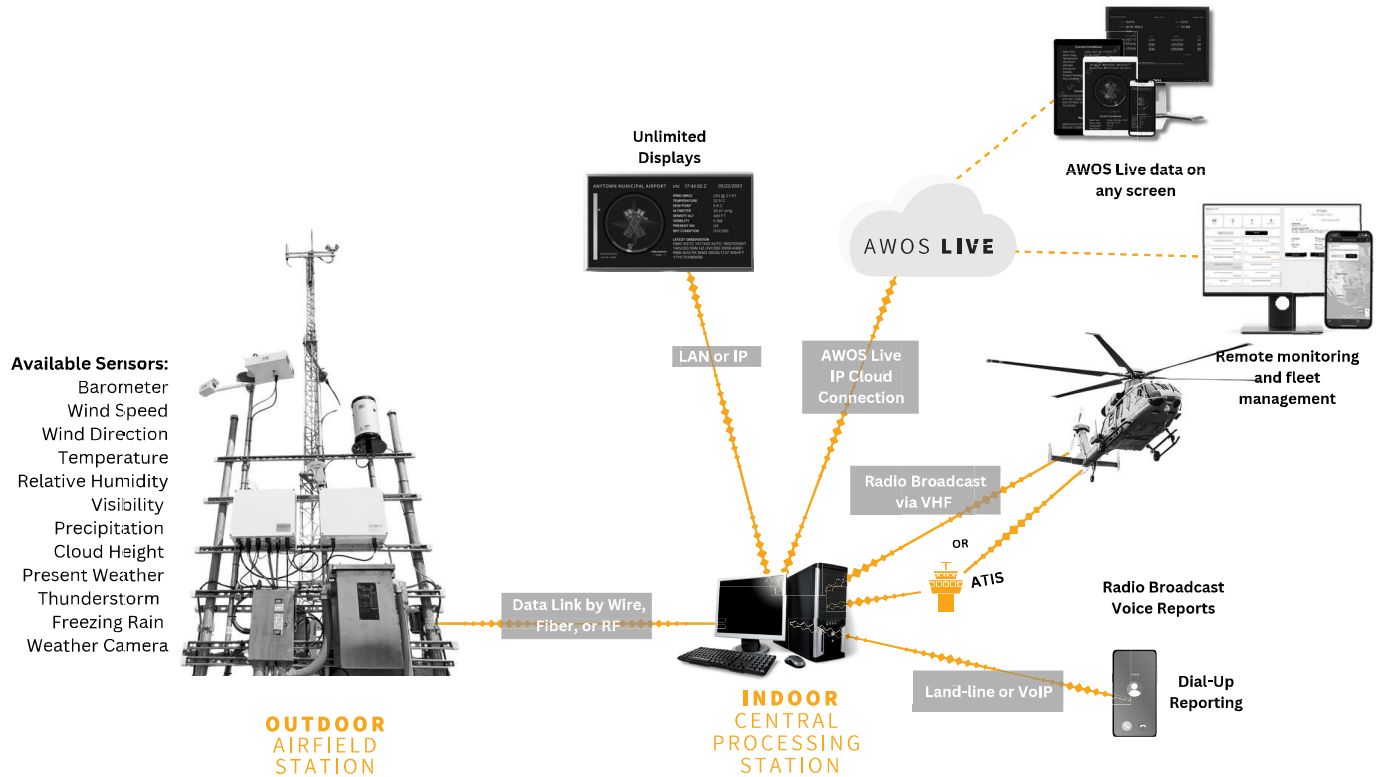


It's the personal touch that matters and that's where we here at Mesotech outshine all the rest. Customer service matters to us and we deliver in a way that the larger companies can only dream of. Our help desk is fully staffed by engineers and technicians who provide daily support. When you call us, we answer, we listen, and we act fast producing solutions quickly and efficiently.



SYSTEM OVERVIEW

AWA™ Automated Weather Observing Systems provide airports with a robust, end-to-end solution for continuous weather monitoring, integrating advanced meteorological sensors, centralized data processing, and a secure cloud platform to deliver real-time, ICAO-compliant weather observations and diagnostics.



Outdoor Airfield Station:

Equipped with meteorological sensors, the airfield station collects and verifies data quality before transmitting sensor readings and diagnostic information. Sensor suite is customizable to meet airport needs.

Indoor Central Processing

Station: This station processes sensor data into accurate weather observation reports, archives the information, and serves as a hub for user interaction and data dissemination.

Secure Cloud Platform -

AWOS Live: Designed for 24/7 remote monitoring, AWOS Live enables pilots to access real-time access to weather data and system diagnostics.

Airport Weather Advisor®
AWOS Live Weather Camera

Real-Time Weather, Visual, & Remote Insights at Your Fingertips





CONTACT US

we're here to help you make informed decisions about your aviation weather systems. Whether you're looking for expert advice, support for an existing system, or customized solutions to meet your airport's needs, our team is ready to assist.

Your Weather, Our Expertise. Let's Connect!



SCAN HERE

TO COMPLETE OUR INTEREST FORM,
AND A MEMBER OF OUR TEAM WILL
CONTACT YOU SHORTLY.

OR CONTACT US

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