MILITARY WEATHER STATIONS

Mission Reliability in Harsh Environments and Critical Operations
Fixed Aviation

Campbell has successfully installed over 1,200 Automated Weather Observing Systems (AWOS) at military and commercial airports worldwide.

Campbell's AWOS solutions are rugged and built to meet our customers' specifications. Installations range from small airfields and heliports to CAT I-IV airports. Military mission uptime is near 100%.

With Campbell’s web-based Aviation INTERCEPT® software, no client licenses are required for multiple users. Data reporting is available in METAR, SPECI, and other formats.

Remote maintenance support is standard. Communications options include cable, fiber optic, Ethernet, radio, and satellite. The systems are AC and/or solar-powered.


Portable/Tactical Aviation

Campbell's portable/tactical weather stations are designed specifically to meet the demands of tactical or rapid deployment use, and are particularly suited for remote locations with harsh environmental conditions.

These systems are built with Campbell’s rugged WEATHERPAK® technology and professional grade meteorological sensors. Campbell’s web-based Aviation INTERCEPT® software is simple and easy to use on a laptop. Data can also be sent remotely by cable (RS232/RS485), spread spectrum radio, GSM/GPRS modem, or satellite radio.

Campbell’s portable/tactical system is packed in durable, waterproof cases and can be assembled in minutes. The systems are capable of running on solar or temporary power and are ICAO/WMO/FMH-1 compliant.

Co-developed with the US Navy, Campbell’s WEATHERPAK® weather stations provide the ruggedness and reliability needed for operations in a harsh marine environment.

WEATHERPAK® contains all sensors required for a complete weather station. It is constructed of a superior non-corrosive material and double o-ring sealed. The station has no exposed cables or connectors.

Using an integrated GPS and compass, WEATHERPAK® calculates both True and Relative winds. Weather data are transmitted to an onboard display and/or integrated to the ship’s network. Communication protocols include NMEA 0183, RS232, RS485, and more.


Campbell’s WEATHERPAK® RESPONSE weather stations provide on-site, real-time weather data for chemical, biological, and radiological response.

WEATHERPAK® is impervious to airborne chemicals and can be set up in less than 60 seconds, without tools, by one person wearing full protective gear. The no-moving-parts wind sensor is accurate at very low wind speeds and requires no calibration.

WEATHERPAK® automatically updates ALOHA® and most other chemical dispersion model software. Data are transmitted up to five miles line-of-sight by way of an internal UHF or Spread Spectrum radio.

Military experience and expertise
Campbell’s team of engineers have decades of experience designing measurement systems used by militaries worldwide. Our systems have been delivered to military customers on every continent, including the US Navy’s station at the South Pole. Our projects range from single systems to large, multi-year contracts.

Proven and field-tested technology
Campbell’s weather stations are built for critical field operations in the most demanding and remote environments. Our systems are constructed of the toughest materials. In addition to mission critical performance, our systems have built-in diagnostics and are simple to operate and maintain. Globally, our military aviation weather stations have near 100% operability, even 10-15 years after installation.

Customer-driven, turn-key solutions
As a leading systems integrator, we source the most advanced meteorological sensors available. The modular design of our systems enables us to build a system to fit any size application. We are able to optimize our systems to meet our customers’ exact technical requirements and budgets. We also provide system design consultation, software development and configuration, testing, and installation services, for a complete end-to-end solution.

Best Value
Weather stations from Campbell provide a combination of ruggedness, reliability, and flexibility that military customers expect. Our data processing technology enables meteorological sensors to be added, upgraded, or replaced over time. This means that customers will spend less money on maintenance, sensor replacement, and upgrades during the life of the system.

Photos clockwise from top left: Vehicle mounted tactical system for the US Marines; ZENO® fixed base system; WEATHERPAK® portable/tactical system for the Afghanistan Army; ZENO® aviation system at the South Pole; Vehicle mounted WEATHERPAK®s.