# Aviation Weather Solutions





## Aviation weather solutions for every situation

Aviation weather solutions from Campbell Scientific are born out of exceptional quality hardware and modern flexible software. Utilising our class leading optical products and dataloggers to accurately measure weather phenomena, combined with Metcom, our cutting edge AWOS software suite, you can be confident in the knowledge you have the best information on hand to operate safe, accurate, reliable services from a single helipad through to international airports.

Compliant to ICAO standards and constantly updated to reflect the latest ICAO recommendations and operating practices, you can trust our aviation weather solutions to provide features for modern service delivery.

From our sensors, to our Metcom software suite Campbell Scientific aviation products deliver comprehensive features with simplicity of deployment and configuration, presented to airport staff in a clear, uncluttered and comprehensive manner, enabling you to provide the best service to your airport customers.

QIM

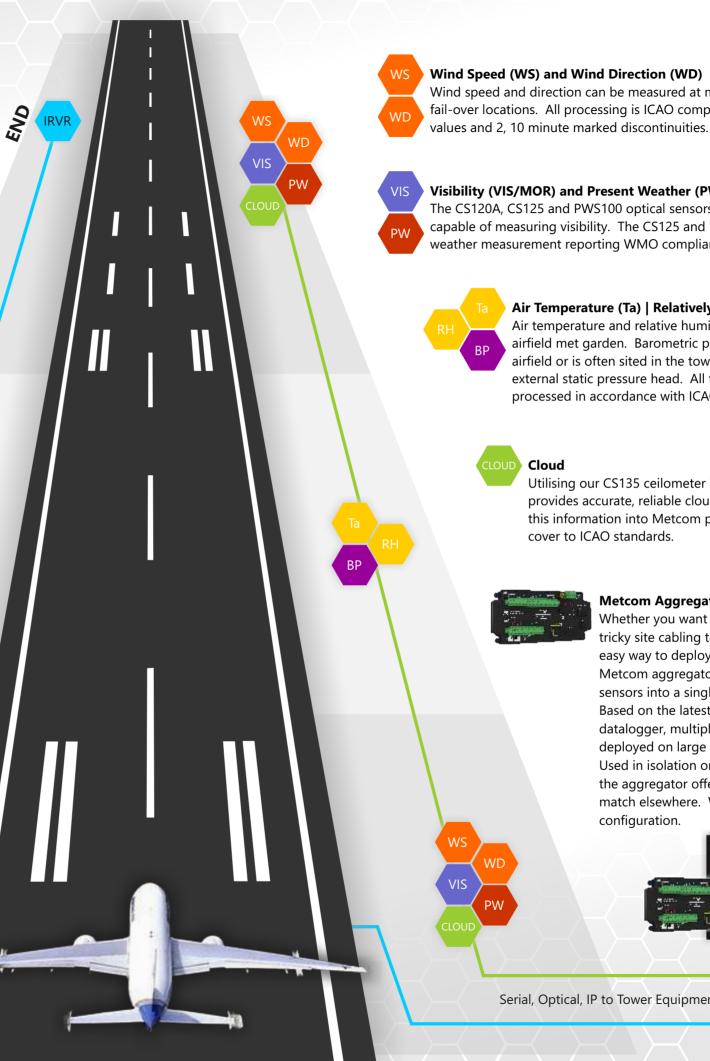
Look over the features of a typical AWOS (Automated Weather Observing System) as shown here. Our systems are fully configurable to meet your specific requirements, whether you have a single helipad for emergency operations such as Police or Air Ambulance, a small airfield providing daytime flights or you are a large international airport dealing with some of the busiest skies in the world, we can tailor a system that will provide the aviation meteorology needed to ensure smooth operations.

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IRVR (Instrumented Runway Visual Range) The CS-IRVR system from Campbell Scientific can be deployed in a single measurement site configuration, right through to a three-point system with sites at TDZ, MID and END as shown here. Providing state of the art forward scatter RVR information through a stand-alone display or fed directly into our Metcom system.

ZQZ





Wind speed and direction can be measured at multiple sites and configured with fail-over locations. All processing is ICAO compliant providing instantaneous

## Visibility (VIS/MOR) and Present Weather (PW)

The CS120A, CS125 and PWS100 optical sensors from Campbell Scientific are all capable of measuring visibility. The CS125 and PWS100 also offer present weather measurement reporting WMO compliant present weather codes.

## Air Temperature (Ta) | Relatively Humidity (RH) | Pressure (BP)

Air temperature and relative humidity are typically sited in the airfield met garden. Barometric pressure can be sited out on the airfield or is often sited in the tower equipment room with an external static pressure head. All feed into Metcom where they are processed in accordance with ICAO, producing QNH and QFE.

Utilising our CS135 ceilometer in single or multiple locations provides accurate, reliable cloud height measurement. Feeding this information into Metcom provides fully compliant cloud cover to ICAO standards.

### Metcom Aggregator

Whether you want to use analogue sensors, have tricky site cabling to deal with or simply want an easy way to deploy field sites on the airfield, the Metcom aggregator will consolidate multiple sensors into a single data stream ready for Metcom. Based on the latest trusted Campbell Scientific CR6 datalogger, multiple Metcom aggregators can be deployed on large airfields to simplify installations. Used in isolation or as part of a larger deployment the aggregator offers a level of flexibility hard to match elsewhere. With a simple built-in configuration.

Serial, Optical, IP to Tower Equipment Room

# **Inside the Tower**

Building on a solid airfield sensor deployment the control tower is home to all the key elements bringing together a full AWOS. From the CS-IRVR controller receiving visibility and background luminance information ready to combine with runway light intensity and direction, to the Metcom controller simplifying audio routing. The tower equipment room is the hub of the system facilitating all the elements needed by the Metcom software suite to provide Live Met, METAR, SPECI, Arrival and Departure ATIS, Cloud and Visibility visualisation, AFTN connectivity, through interactive and passive browser based displays.



To facilitate easy installation and dual server fail-over, the metcom controller provides balanced audio lines to route audio from either a single or dual server setup. Separate audio feeds are provided for arrival, departure and telephone ATIS. PTT support is also included to ensure maximum compatibility.

Campbell Scientific aviation solutions including the Metcom family can scale from a single helipad right through to an automatic failover multi-server system that can handle the needs of the largest of international airports. Campbell Scientific can offer a complete set of sensors for instrumenting your airfield, but remains mindful of your existing investments and offers support for a wide range of sensors so if you have a specific requirement get in touch, we are happy to discuss all of your requirements and advise on the best solution for you.

For further information please contact our Aviation Team on +44(0)1509 828888 or aviation@campbellsci.co.uk

