

Meteorological
aeronautic
sensors



Automatic Weather
Station networks

Automated Weather
Observing System and
Wind profiler radars



The Weather Sense



At the forefront of innovation



A WIDE RANGE OF APPLICATIONS

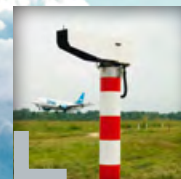
- ✓ *Aeronautics*
- ✓ *Climatology*
- ✓ *Synoptic*
- ✓ *Agro meteorology*
- ✓ *Military field*

DEGREANE HORIZON is recognized as the world leader in designing and manufacturing of turnkey Met measurement systems :

- Automatic Weather Station networks,
- Meteorological aeronautic sensors,
- Automated Weather Observing System,
- Wind profiler radars.

DEGREANE HORIZON is the favorite partner of National Meteorological Services who have been using our products with satisfaction for decades.

Major national observation networks are equipped by DEGREANE HORIZON with synoptic and climatologic stations, sensors with high added value (visibility, ground state, cloud base height) and wind profiler radars.



Synoptic and climatological station networks

AWS ADAPTED TO ALL WEATHER CONDITIONS

XARIA300 AWS was designed to satisfy the latest requirements in weather data acquisition.



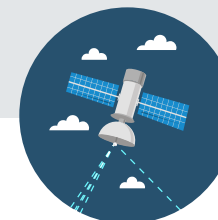
DEGREANE HORIZON designs and manufactures automatic weather stations since 1984.

More of 1500 stations have been deployed, sometimes on isolated sites, assuring the acquisition and processing of standard meteorological parameters (wind speed and direction, humidity, global radiation, rainfall...) in accordance with the WMO and ICAO standards.

Meteorological data transmission is available through a broad range of communication means (GSM, GPRS, PSTN, DCP, Radio, wired connection...)

FIELDS OF APPLICATION

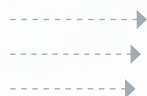
- ✓ Synoptic weather stations with local operating on CAOBS Chrome software
- ✓ Climatological weather station networks managed by a data collection platform



AUTOMATIC WEATHER STATION WITH LOCAL OPERATING

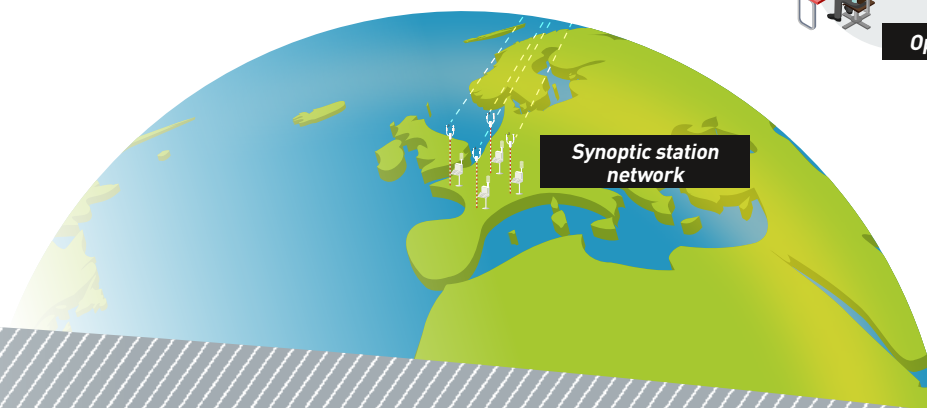


Synoptic Met garden



Synoptic operating workstation

NATIONAL NETWORK OF AUTOMATIC WEATHER STATIONS



Synoptic station network



Operations center

A full range of weather sensors

VISIBILITY SENSORS



FORWARD SCATTER SENSOR

The **DF320** forward scatter is a sensor designed for visibility measurement. It is used for synoptic (Meteorological Optical Range - MOR - up to 70 km) and aeronautical visibility measurement.

Associated with a luminancemeter it allows calculation of the Runway Visual Range (RVR) and the Aeronautical Visibility (AV).



TRANSMISSOMETER

The **TR30LED** transmissometer is a sensor designed for visibility measurement in aeronautical applications.

It measures the Transmissive Ability of the Atmosphere (TAA) and calculates the Meteorological Optical Range (MOR).

Calculation of the Runway Visual Range (RVR) is possible combining TAA, luminance (LU320) and runway light intensity measurement.



PRESENT WEATHER SENSOR

The **TP320** present weather sensor measures visibility, identifies and quantifies rainfall and provides present and past weather diagnostics.

It is composed of a forward scatter sensor and a laser disdrometer.

30 years of expertise
for a broad range
of know-how



WIND SENSOR

The **DEOLIA396** wind sensor is an integrated system composed of an anemometer, a wind-vane and an universal wind speed/direction transmitter.

It can be used in any configurations in accordance with ICAO standards.



CEILOMETER

The **TL320** cloud ceilometer measures the cloud base height, vertical visibility and cloud cover.

Using the LIDAR principle (Light Detection and Ranging) the TL320 sensor can report up to three cloud layers.



GROUND STATE SENSOR

The **SOLIA** ground state sensor determines the state of the ground, indicates the occurrence of freezing precipitations and measures the height of snow.

SIOMA - Automated Weather Observing System (AWOS)



Over 400 airports equipped, in more of 100 countries, some with extreme weather conditions

SIOMA has been developed to collect, process and display park and runway MET parameters used by observers, forecasters and air-traffic controllers.

The SIOMA system includes a set of meteorological sensors, an acquisition platform, a CAOBS Chrome suite software and digital indicators used as back-up. It conforms with the latest WMO and ICAO recommendations and standards.



- ✓ **WEB technology for an optimal visibility**
- ✓ **Easy encoding of WMO/ICAO standardized reports**
- ✓ **Comprehensive meteorological data display via AEROVIEW**
- ✓ **Real time management, storage, display and printout of MET data**

CAOBS Chrome software at the heart of the SIOMA system.

It ensures MET parameter acquisition/processing and assists staff for airport operations in encoding METAR/SPECI observation messages and TAF/SIGMET/AIRMET forecast messages.

CAOBS Chrome allows a remote supervision of the meteorological sensors, simplifying the maintenance operations.



METAR/SPECI encoding page

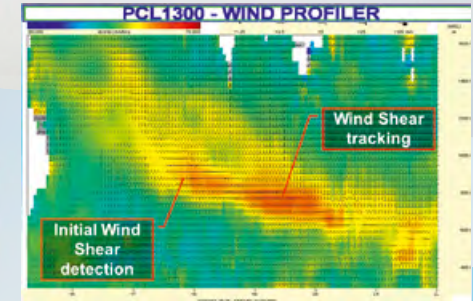
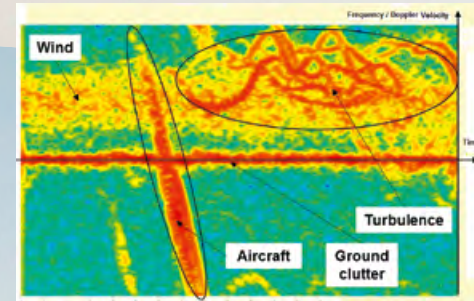


Display in control tower



PCL1300 Wind Profiler radar

PCL1300 is entirely designed and manufactured by DEGREANE HORIZON. It is deployed and field proven in more than 50 sites.



PCL1300 wind profiler is rugged and reliable. It provides unmatched performances and is user friendly.

PCL1300 can be delivered in stationary or transportable configuration, available in three or five antenna panels and is equipped with 500 W or 3 500 W power transmitter.

It provides vertical wind profile at altitudes ranging from 75 m up to 5 000 m depending on the transmit power and atmospheric conditions. A temperature profile is obtained when combined with a RASS system (Radio Acoustic Sounding System).

ON THE 5 CONTINENTS, THEY TRUST OUR EXPERTISE

- ✓ National meteorological services
- ✓ Civil aviation authorities
- ✓ Armed forces / Ministry of defense
- ✓ Meteorological research institutes

