



XARIA 300 Chrome

The XARIA300 Chrome Weather Station.

For more than 20 years, DEGREANE HORIZON has designed and produced weather station models such as the MIRIA, AURIA and XARIA. They are used in more than 100 countries and have been approved by a large number of national meteorological institutions including Météo France.

The versatility enables the acquisition of various weather parameters such as air temperature, air humidity, rainfall, wind speed and direction, atmospheric pressure, global radiation, leaf wetness...

The sensor data acquisition is made using inbuilt analog and/or digital interface boards communicating on a standard field bus. When more sensors are needed, additional modules with extra digital and/or analog interface boards can be daisy chained.

With such feature, the XARIA300 Chrome is the ideal solution for many applications :

- Airport
- Meteorology
- Agrometeorology
- Hydrology
- Road Weather
- Research





Features

Acquisition of sensor data:

- Up to 8 digital or analog inputs for the XARIA300 Chrome.
- Additional input modules can be daisy chained.
- Up to 16 analog or digital inputs per additional module.

Data storage:

- The memory capacity, dedicated to the datalogging, allows the storage of more than 20,000 dated measurements.
- The size of the data storage per type of sensor can be selected.

Communication:

- Interface with inbuilt display/keyboard.
- RS232 maintenance port.
- USB adaptor and XARIA300 Chrome utility software for sensors interface boards configuration.
- RS232, RS485, FSK, Ethernet with adaptor.
- Slot with a removable memory card (SD/MMC).
- GPRS, GSM, Radio, Satellite...

Specifications

Data processing:

• The specifications for the data acquisition and the data processing comply with both the WMO and the ICAO standards (period of sampling, algorithms, etc.).

Inputs:

Designation	Measurement range	Accuracy
Digital interface	Frequency 0-5KHz Potentiometer 0-10KΩ RS232 / RS485 / FSK	+/- 1 Hz < 0.5% of full range
Interface 0-200 Ohms	Resistance 0-200Ω	< 0.02% of full range
Interface 1.25 V / 25mA (high resolution)	Voltage 0-1.25V Current 0-25mA	< 0.08% of full range
Interface 0-1,25 V (low resolution)	Voltage 0-1,25V	< 1% of full range
Interface +/- 0,625 V	Differential voltage : -0.625 to+0.625 V	< 0.004% of full range
Frequency / Counting interface	Filtering by software Frequency 0-5KHz	+/- 1 Hz

Operating range:

• -40° to +80°C, 0 to 100% of relative humidity.

Power supply:

 15 Volts DC or solar panel. Operation on battery with autonomy up to 30~70 days depending on the operating configuration.

Protection:

Filtering EMI/RFI and lightning protection on each input/output.

Housing:

• The tropicalized electronics of XARIA 300 Chrome can be integrated in a IP65 box. This polyester cabinet can be installed on a structure to be fixed on the ground or hanged on a mast.

Maintenance:

• The XARIA300 Chrome does not require any maintenance or calibration (only maintenance of the battery and the solar power supply).

