AR200
Ultrasonic Anemometer

THETA INSTRUMENTS
Sensing And Processing

AR200 is a robust and reliable ultrasonic anemometer. It measures surface wind, which mainly used in the following situations:

- Wind power station；
- Electric power safety monitoring；
- Meteorological monitoring；
- Bridge and tunnel；
- Sailing；
- Airport；
- Urban environment monitoring.

KEY FEATURES

- Integrated design for measuring wind speed and direction；
- Provide stable and accurate measurement measurement in all weather conditions；
- Pollution and corrosion resistance；
- Easy to install and remove；
- Provide digital and analog signal at the same time；
- Maintenance-free.

THETA INSTRUMENTS

Technical Data		
General		
IP Class	IP66	
Dimensions	height 210 mm width 160 mm	
Weight	1.4Kg	
Analog outputs	4 … 20 mA,1 … 5V	
Digital outputs	RS-485	
Operating voltage	12 … 30VDC , 50mA typical@ 12VDC	
Heating voltage	5A @ 24VDC	
Operating temperature	-40 … ＋70℃	
Operating humidity	5% … 100%RH	
Connector	Aerospace plug	
Connection cable	5m	
Measuring parameter		
Wind Speed	Principle	Ultrasonic
	Measurement range	0 … 60m/s
	Accuracy	±0.2 m/s or 3% of reading, whichever is greater
	Resolution	0.1m/s
Wind Direction	Principle	Ultrasonic
	Measurement range	0 … 359.9°
	Accuracy	±3°
	Resolution	0.1°

THETA INSTRUMENTS

AR300
3-Axis Ultrasonic Anemometer

THETA INSTRUMENTS
Sensing And Processing

AR300 is a precision anemometer offering three-axis wind measurement data, which is particularly suitable for precision wind measurement applications requiring 3-axis data involving high wind speeds. It mainly used in the following situations :

- Wind power station ;
- Electric power safety monitoring ;
- Meteorological monitoring ;
- Bridge and tunnel ;
- Sailing ;
- Airport ;
- Urban environment monitoring.

KEY FEATURES

- Precision 3-Axis sonic anemometer ;
- Polar format or axis velocities outputs ;
- Stainless steel construction ;
- Easy to install and remove ;
- Provide digital and analog signal at the same time ;
- Maintenance-free.

THETA INSTRUMENTS

Technical Data	
General	
IP Class	IP66
Dimensions	height 750 mm width 240 mm
Weight	2.5Kg
Analog outputs	4 … 20 mA,1 … 5V
Digital outputs	RS-485
Operating voltage	12 … 30VDC , 50mA typical@ 12VDC
Operating temperature	-40 … ＋70℃
Operating humidity	5% … 100%RH
Connector	Aerospace plug
Connection cable	5m
Measuring parameter		

Wind Speed	Principle	Ultrasonic
	Measurement range	0 … 60m/s
	Accuracy	±0.2 m/s or 3% of reading, whichever is greater
	Resolution	0.1m/s
Wind Direction	Principle	Ultrasonic
	Measurement range	0 … 359.9°
	Accuracy	±2°
	Resolution	0.1°

THETA INSTRUMENTS

MP500
MICRO WEATHER STATION

THETA INSTRUMENTS
Sensing And Processing

MP500 is a compact and lightweight multi-sensor instrument that measures 5 essential weather parameters, which mainly used in the following situations:

- .。 Wind power station；
- Electric power safety monitoring；
- Meteorological monitoring；
- Bridge and tunnel；
- Sailing；
- Airport；
- Urban environment monitoring.

KEY FEATURES

- 1、Measures 5 most essential weather parameters；
- 2、Pollution and corrosion resistance;
- 3、Compact and lightweight structure；
- 4、No moving parts；
- 5、Easy to install and remove；
- 6、Provide digital and analog signal at the same time；
- 7, Maintenance-free.

THETA INSTRUMENTS

Technical Data		
General		
IP Class	IP65	
Dimensions	height 234 mm width 160 mm	
Weight	1.5Kg	
Analog outputs	4 … 20 mA,1 … 5V	
Digital outputs	RS-485	
Operating voltage	12 … 30VDC , 50mA typical@ 12VDC	
Operating temperature	-40 … ＋70℃	
Operating humidity	5% … 100%RH	
Connector	Aerospace plug	
Connection cable	5m	
Measuring parameter		
Wind Speed	Principle	Ultrasonic
	Measurement range	0 … 60m/s
	Accuracy	±0.2 m/s or 2% of reading, whichever is greater
	Resolution	0.1m/s
Wind Direction	Principle	Ultrasonic
	Measurement range	0 … 359.9°
	Accuracy	±2°
	Resolution	0.1°
Barometric Pressure	Principle	Piezoresistor
	Measurement range	10 … 1100hpa
	Accuracy	±0.5hpa
	Resolution	0.1hpa
Air temperature	Principle	Diode voltage
	Measurement range	-40 … ＋80℃
	Accuracy	±0.2℃
	Resolution	0.1℃
Relative humidity	Principle	Capacitive
	Measurement range	0 … 100% RH
	Accuracy	±3% RH
	Resolution	0.10%

THETA INSTRUMENTS

MP600
MICRO WEATHER STATION

THETA INSTRUMENTS
Sensing And Processing

MP500 is a compact and lightweight multi-sensor instrument that measures 6 essential weather parameters, which mainly used in the following situations:

- Wind power station ;
- Electric power safety monitoring ;
- Meteorological monitoring ;
- Bridge and tunnel ;
- Sailing ;
- Airport ;
- Urban environment monitoring.

KEY FEATURES

- Measures 6 most essential weather parameters ;
- Pollution and corrosion resistance;
- Compact and lightweight structure ;
- No moving parts ;
- Easy to install and remove ;
- Provide digital and analog signal at the same time ;
- Maintenance-free.

THETA INSTRUMENTS

Technical Data		
General		
IP Class	IP65	
Dimensions	height 234 mm width 160 mm	
Weight	1.5Kg	
Analog outputs	4 … 20 mA,1 … 5V	
Digital outputs	RS-485	
Operating voltage	12 … 30VDC , 50mA typical@ 12VDC	
Operating temperature	-40 … ＋70℃	
Operating humidity	5% … 100%RH	
Connector	Aerospace plug	
Connection cable	5m	
Measuring parameter		
Wind Speed	Principle	Ultrasonic
	Measurement range	0 … 60m/s
	Accuracy	±0.2 m/s or 2% of reading, whichever is greater
	Resolution	0.1m/s
Wind Direction	Principle	Ultrasonic
	Measurement range	0 … 359.9°
	Accuracy	±2°
	Resolution	0.1°
Barometric Pressure	Principle	Piezoresistor
	Measurement range	10 … 1100hpa
	Accuracy	±0.5hpa
	Resolution	0.1hpa
Air temperature	Principle	Diode voltage
	Measurement range	-40 … ＋80℃
	Accuracy	±0.2℃
	Resolution	0.1℃
Relative humidity	Principle	Capacitive
	Measurement range	0 … 100% RH
	Accuracy	±3% RH
	Resolution	0.10%
Precipitation	Principle	Piezoelectricity
	Measurement range	0 … 200 mm/h
	Resolution	0.1mm/h

THETA INSTRUMENTS

MP650
MICRO WEATHER STATION

THETA INSTRUMENTS
Sensing And Processing

MP650 is a compact and lightweight multi-sensor instrument that measures 6 essential weather parameters, which mainly used in the following situations:

- Wind power station ;
- Electric power safety monitoring ;
- Meteorological monitoring ;
- Bridge and tunnel ;
- Sailing ;
- Airport ;
- Urban environment monitoring.

KEY FEATURES

- Measures 6 most essential weather parameters ;
- Pollution and corrosion resistance;
- Compact and lightweight structure ;
- No moving parts ;
- Easy to install and remove ;
- Provide digital and analog signal at the same time ;
- Maintenance-free.

THETA INSTRUMENTS

Technical Data		
General		
IP Class	IP65	
Dimensions	height 234 mm width 160 mm	
Weight	1.5Kg	
Analog outputs	4 … 20 mA,1 … 5V	
Digital outputs	RS-485	
Operating voltage	12 … 30VDC , 50mA typical@ 12VDC	
Operating temperature	-40 … +70℃	
Operating humidity	5% … 100%RH	
Connector	Aerospace plug	
Connection cable	5m	
Measuring parameter		
Wind Speed	Principle	Ultrasonic
	Measurement range	0 … 60m/s
	Accuracy	±0.2 m/s or 2% of reading, whichever is greater
	Resolution	0.1m/s
Wind Direction	Principle	Ultrasonic
	Measurement range	0 … 359.9°
	Accuracy	±2°
	Resolution	0.1°
Barometric Pressure	Principle	Piezoresistor
	Measurement range	10 … 1100hpa
	Accuracy	±0.5hpa
	Resolution	0.1hpa
Air temperature	Principle	Diode voltage
	Measurement range	-40 … +80℃
	Accuracy	±0.2℃
	Resolution	0.1℃
Relative humidity	Principle	Capacitive
	Measurement range	0 … 100% RH
	Accuracy	±3% RH
	Resolution	0.10%
Solar radiation	Principle	Photoelectric effect
	Spectral range	300 ⋯ 3000nm
	Measurement range	0 ⋯ 2000W/㎡
	Non-linearity error	≤3％

THETA INSTRUMENTS

iLeak 200
ULTRASONIC LEAK DETECTOR

Ultrasonic detection is now recognised to be a decisive strategic priority. It enables you to achieve major savings through the elimination of huge wastage. It avoids numerous unexpected incidents which are usually very costly. It also contributes to the improvement of the quality of your production as well as output. The iLEAK ultrasound detector is the essential multifunction tool for your predictive maintenance. Its user friendly design ensures that all your staff can use it. In a single tool, it provides you with the most complete response to a wide range of maintenance operations.

- Leak detection in compressed air, steam, vacuum, gaseous fluid networks;
- Bearing condition monitoring;
- Ultrasound based lubrication;
- Detection of pump cavitations;
- Steam traps inspection;
- Detection of internal blockage or leaks in valves and hydraulic equipment;
- voltage inspections.

KEY FEATURES

- Touch screen technology;
- Visual leak detection;
- Focusing technology and laser pointer provide accurate detection;
- Large storage space;
- High megapixel camera;
- Adjustable testing frequency ;
- Provide test data storage and review;
- Easy to install and remove.

Technical Data	
General	
IP Class	IP65
Dimensions	550 x 470 x 200 mm
Weight	1.1 kg
Operating temperature	-40 … +70℃
Display	QVGA Touch Screen
Laser Pointer	<5mW … Wavelength 640nm
Battery	Lithium-ion rechargeable
operation time	8h
Camara	5.0 mega pixel
SD Card	8Gb
Communication interface	USB
Measuring parameter	
Frequency range	20 … 100KHz
Response Time	≤10ms
Sensitivity	Detects 0.1mm diameter leak @ 3bar at a distance of 20 m
Adjustable gain	50 … 110db