



HD 52.3D... 2 AXES ULTRASONIC ANEMOMETER

2 axes ultrasonic Anemometers series HD 52.3D....

The instruments of the series HD52.3D... are 2 axes ultrasonic static anemometers for measuring:

- · Wind speed and direction, U-V Cartesian components of wind speed,
- · Relative Humidity and Temperature (option, code "17"),
- · Diffuse Solar Radiation (option, code "P"),
- · Barometric pressure (option, code "4").

All models are equipped with compass.

RS232, RS485 and SDI-12 serial interfaces are available with **NMEA**, **MODBUS-RTU** and **SDI-12** communication protocols.

All versions have two analogical outputs, both for wind speed and for direction, factory configurable among $4\div20\text{mA}$ (standard), $0\div1\text{V}$, $0\div5\text{V}$, $0\div10\text{V}$ (to be specified when ordering).

The **heater** option prevents the accumulation of snow and ice from forming, allowing accurate measurements in all environmental conditions.

Optionally available, ILAC-MRA (ACCREDIA) traceable factory calibration.

Advantages:

- · The absence of moving parts minimizes maintenance;
- High sensitivity for detecting very low speeds, which are not detectable by traditional methods:
- The low power of the instrument allows installation in remote sites, with power from solar panel and battery;
- The heating option "R" prevents the accumulation of snow and ice from forming, allowing accurate measurements in all environmental conditions;
- Fast and easy installation (on 40mm diameter pole, optional installation kit HD2004.20), alignment facilitated by built-in compass;
- The available measurement options join together in one single, compact and lightweight instrument, the main variables of interest in weather stations;
- MODBUS RTU output allows instrument networking.

Typical applications:

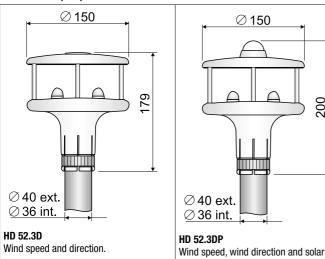
- · Weather stations
- · Environmental monitoring
- Agriculture
- Sports
- · Marine and Harbour applications
- Airports
- HVAC
- · Construction/Crane safety
- · Renewable energy
- · Building automation

Technical specifications:

### Wind speed	•		
Measuring Range 060 m/s Resolution 0.01 m/s Accuracy Whichever is greater ± 0,3 m/s or ± 2%, (035 m/s) ± 3% (> 35 m/s) Wind direction Employed sensor type Employed sensor type Ultrasonic Measuring Range 0360° Resolution 0.1° Accuracy ± 2° RMSE from 1.0 m/s Compass Employed sensor type Measuring Range 0360° Resolution 0.1° Accuracy ± 1° Air temperature (option 17 is requested) Employed sensor type Pt100 Measuring Range -40+60 °C Resolution 0.1 °C Accuracy ± 0.15°C ± 0.1% of the measure Relative Humidity (option 17 is requested) Employed sensor type Capacitive Measuring Range 0100%RH Accuracy (@ T = 1535 °C) ± 1,5%UR (090%RH), ± 2%RH (remaining field) Accuracy (@ T = 5+60 °C) ± 1,5 % of the measure)%RH Barometric Pressure (option 4 is requested) Principle piczoresistive			
Resolution			
## Wind direction Employed sensor type Measuring Range 0360° Resolution 0.1° Accuracy ± 2° RMSE from 1.0 m/s Compass Employed sensor type Magnetic Measuring Range 0360° Resolution 0.1° Accuracy ± 1° Accuracy ± 1° Accuracy ± 1° Accuracy ± 1° Accuracy † 2,15° € 2,1% of the measure Resolution 0.1° Accuracy (@ 1 = 1535 °C) Accuracy (@ 1 = 1535 °C) Accuracy (@ 1 = 40+60 °C) Accuracy (@ 1 = 535 °C) Accuracy (@ 1 = 535 °C) Accuracy (@ 1 = 60+60 °C) Accuracy (@ 1 = 7.40+60 °C) Accuracy (@ 1 = 60+60		060 m/s	
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Relative Humidity (option 17 is requested) Employed sensor type	Resolution	0.1 °C	
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Resolution Accuracy (@ T = 1535 °C)	Employed sensor type	Capacitive	
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Accuracy (@ T = -40+60 °C) ± (1,5 + 1,5% of the measure)%RH Barometric Pressure (option 4 is requested) Principle Piezoresistive Measuring Range 6001100 hPa Resolution 0.1 hPa Accuracy ± 0,5 hPa @ 20 °C Solar Radiation (option P is requested) Employed sensor type Thermopile Measuring Range 02000 W/m² Resolution 1 W/m² Accuracy 2 nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Resolution	0.1%	
Barometric Pressure (option 4 is requested) Principle Piezoresistive Measuring Range Resolution O.1 hPa Accuracy ± 0,5 hPa @ 20°C Solar Radiation (option P is requested) Employed sensor type Thermopile Measuring Range O2000 W/m² Resolution 1 W/m² Accuracy 2 dass Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP147) H=336mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Heusing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Accuracy (@ T = 1535 °C)	\pm 1,5%UR (090%RH), \pm 2%RH (remaining field)	
Principle Piezoresistive Measuring Range 6001100 hPa Resolution 0.1 hPa Accuracy ± 0,5 hPa @ 20°C Solar Radiation (option P is requested) Employed sensor type Thermopile Measuring Range 02000 W/m² Resolution 1 W/m² Accuracy 2nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3DP4) H=336mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Accuracy (@ T = -40+60 °C)	± (1,5 + 1,5% of the measure)%RH	
Measuring Range 6001100 hPa Resolution 0.1 hPa Accuracy ± 0,5 hPa @ 20°C Solar Radiation (option P is requested) Employed sensor type Thermopile Measuring Range 02000 W/m² Resolution 1 W/m² Accuracy 2nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3DP4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Height about 1 Kg (full version, HD52.3DP17, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AlSI 316	Barometric Pressure (option 4	is requested)	
Resolution O.1 hPa Accuracy ± 0,5 hPa @ 20°C Solar Radiation (option P is requested) Employed sensor type Thermopile Measuring Range O2000 W/m² Resolution 1 W/m² Accuracy 2nd class Pyranometer General features Power Supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols Analog Outputs 1 Sunday	Principle	Piezoresistive	
Accuracy ± 0,5 hPa @ 20°C Solar Radiation (option P is requested) Employed sensor type Thermopile Measuring Range 02000 W/m² Resolution 1 W/m² Accuracy 2nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3DP4) H=336mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Measuring Range	6001100 hPa	
Solar Radiation (option P is requested) Employed sensor type Thermopile Measuring Range 02000 W/m² Resolution 1 W/m² Accuracy 2nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Resolution	0.1 hPa	
Employed sensor type Measuring Range 02000 W/m² Resolution 1 W/m² Accuracy 2nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Accuracy	± 0,5 hPa @ 20°C	
Measuring Range 02000 W/m² Resolution 1 W/m² Accuracy 2nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Height Housing Plastic material: LURAN®S (ASA) Metallic parts made of AlSI 316	Solar Radiation (option P is requested)		
Resolution 1 W/m² Accuracy 2nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AlSI 316	Employed sensor type	Thermopile	
Accuracy 2nd class Pyranometer General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AlSI 316	Measuring Range	02000 W/m ²	
General features Power supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AlSI 316	Resolution	1 W/m ²	
Power Supply 1030 Vdc Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3D17, HD52.3D147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AlSI 316	Accuracy	2 nd class Pyranometer	
Power Consumption 26mA @ 12Vdc without heater, 6W with heater Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3D17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AlSI 316	General features		
Serial Outputs RS232, RS485, RS422 and SDI-12 Communication Protocols NMEA, MODBUS-RTU, SDI-12 Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Power supply	1030 Vdc	
Communication Protocols NMEA, MODBUS-RTU, SDI-12 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Power Consumption	26mA @ 12Vdc without heater, 6W with heater	
Analog Outputs 2 analog outputs for wind speed and direction. Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Vorking temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3DP17, HD52.3DP147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight About 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Serial Outputs	RS232, RS485, RS422 and SDI-12	
Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (option 010V requires power supply 1530Vdc) Electrical connection male connector M23 19 poles Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3D17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Communication Protocols	NMEA, MODBUS-RTU, SDI-12	
Working temperature -40+60 °C Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Analog Outputs	Output type to be specified when ordering among 420mA (standard), 01V, 05V and 010V (op-	
Dimensions H=179mm, Ø=150mm (HD52.3D, HD52.3D4) H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3D17, HD52.3D147) Weight about 1 Kg (full version, HD52.3D147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Electrical connection	male connector M23 19 poles	
H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147) Weight about 1 Kg (full version, HD52.3DP147) Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316	Working temperature	-40+60 °C	
Housing Plastic material: LURAN®S (ASA) Metallic parts made of AISI 316		H=200mm, Ø=150mm (HD52.3DP, HD52.3DP4) H=336mm, Ø=150mm (HD52.3D17, HD52.3D147) H=357mm, Ø=150mm (HD52.3DP17, HD52.3DP147)	
Metallic parts made of AISI 316	Weight	about 1 Kg (full version, HD52.3DP147)	
Protection degree IP66	Housing	` ,	
	Protection degree	IP66	



DIMENSIONS (mm)

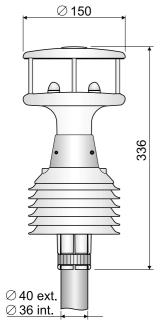


HD 52.3D4

Wind speed, wind direction and barometric pressure.

radiation. HD 52.3DP4

Wind speed, wind direction, solar radiation and barometric pressure

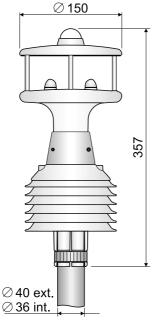


HD 52.3D17

Wind speed, wind direction, temperature and relative humidity.

HD 52.3D147

Wind speed, wind direction, temperature, relative humidity and barometric pressure.



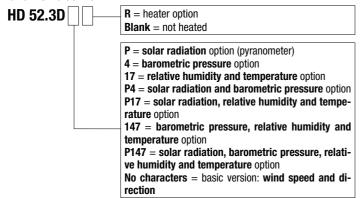
HD 52.3DP17

Wind speed and direction, solar radiation, temperature, relative humidity.

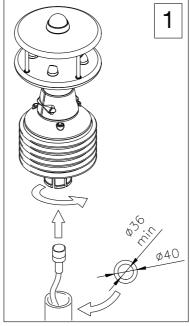
HD 52.3DP147

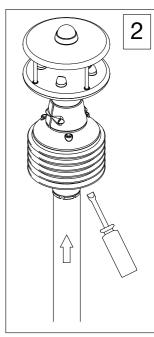
Wind speed, wind direction, solar radiation, temperature, relative humidity and barometric pressure.

PURCHASING CODES



Analog outputs for wind speed and direction: 4...20mA standard; to be requested: 0...1V, 0...5V or 0...10V (0...10V option requires power 15...30Vdc).







HD52.3D...: 2 axes ultrasonic static anemometers for the measure of wind speed and direction, U-V Cartesian components of wind speed, relative humidity and temperature (optional), diffuse solar radiation (optional) and barometric pressure (optional). A compass is supplied. RS232, RS485 and SDI-12 serial outputs, NMEA, MODBUS-RTU and SDI-12 communication protocols. Two analogical outputs, for wind speed and direction, factory among 4÷20mA (standard), 0÷1V, 0÷5V or 0÷10V (to be specified when ordering). Heater option is available. Power supply: 10...30Vdc (15...30Vdc for 0÷10V analog outputs). Installation on a pole: external Ø40mm and internal Ø36mm. Input with M2319-pin male connector and M23 19-pin steering female connector. Optional 5m or 10m cable with a connector on one side and open wires on the other.

ACCESSORIES

CP52.5: Connection cable with M23 19-pin steering female connector on one side, free wires on the other. 5m long.

CP52.10: Connection cable with M23 19-pin steering female connector on one side, free wires on the other. 10m long.

CP52.C: Further M23 19-pin steering female connector.

HD2004.20: Tripod kit for installing anemometers on a flat base. Height 3m.

HD2004.22: 1200x530x34mm Solar panel mounting kit to a Ø40÷50mm pole. AlSI 304 stainless steel.

HD2004.30: 80W monocrystalline solar pannel. Dimensions 1200 x 530 x 34 mm. Model MD5000080 – CS EVOLUTION.

HD32.35: Outdoor housing complete with acquisition system for weather stations. Material: AISI 304 stainless steel. Screen to protect the housing from solar radiation. Powder-coated white. Double locking one of which is a key. Dimensions 450 x 300 x 210 mm. Degree of protection IP66. Supplied with accessories for attachment to the pole diameter 36 ÷ 52 mm. Provided for 100 ÷ 240Vac mains power supply, includes: HD32MT.1 datalogger, AC/DC power supply unit with integrated battery charger, 12V rechargeable backup battery, surge protectors, disconnectors, terminal block for power supply distribution and connectors for connecting the external sensors. Wired and tested.

HD32.35FP: Outdoor housing complete with acquisition system for weather stations. Material: AISI 304 stainless steel. Screen to protect the housing from solar radiation. Powder-coated white. Double locking one of which is a key. Dimensions 450 x 300 x 210 mm. Degree of protection IP66. Supplied with accessories for attachment to the pole diameter 36 ÷ 52 mm. Provided for power supply from solar panel, includes: HD32MT.1 datalogger, solar charge controller, terminal block for power supply distribution and connectors for connecting the external sensors. Wired and tested.
HD32.36: Outdoor housing complete with acquisition system for weather stations.

HD32.36: Outdoor housing complete with acquisition system for weather stations. Material: Polyester with fiberglass-reinforced hot-pressed. Screen to protect the housing from solar radiation, powder-coated anodized aluminum. White. Key lock. Dimensions 415 x 310 x 170 mm. Degree of protection IP66. Supplied with accessories for attachment to the stainless steel pole diameter 36 ÷ 52 mm. Provided for 100 ÷ 240Vac mains power supply, includes: HD32MT.1 datalogger, AC/DC power supply unit with integrated battery charger, 12V rechargeable backup battery, surge protectors, disconnectors, terminal block for power supply distribution and connectors for connecting the external sensors. Wired and tested.

HD32.36FP: Outdoor housing complete with acquisition system for weather stations. Material: Polyester with fiberglass-reinforced hot-pressed. Screen to protect the housing from solar radiation, powder-coated anodized aluminum. White. Key lock. Dimensions 415 x 310 x 170 mm. Degree of protection IP66. Supplied with accessories for attachment to the stainless steel pole diameter 36 ÷ 52 mm. Provided for power supply from solar panel, includes: HD32MT.1 datalogger, solar charge controller, terminal block for power supply distribution and connectors for connecting the external sensors. Wired and tested.









