



HD52.3D 2 AXES ULTRASONIC ANEMOMETERS

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

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

- 8JOETQFFEBOE EJSF DUJPO, 6-7 \$BSUFTJBO DPNQPOFOUTPGXJOETQFFE,
- 3FMBUJWF JVNJEJUZ BOE 5FNQFSBUVSF (optional, code '17'),
- Global 4PMBS 3BEJBUJPO (optional, code 'P'),
- Barometric pressure (optional, code '4').

All models are equipped with compass.

34232, 34485, 34422 BOE 4%*-12 TFSJBM JOUFSGBDFT BSF BWBJMBCMF XJUI NMEA, MODBUS-RTU and SDI-12 communication protocols.

All versions have two analogical outputs, both for wind speed and for direction, GBDUPSZ DPOmHVSBCMF BNPOH 4@20N" (standard), 0@17, 0@57, 0@107 (to be specified when ordering).

OQJPOBMMZ BWBJMBCMF, ("\$\$3%*") ILAC-MRA 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' QSFWFOUT UIF BDDVNVMBUJPO PG TOPX BOE JDF GSPN GPSNJOH, allowing accurate measurements in all environmental conditions;
- *BTU BOE FBTZ JOTUBMMBUJPO (PO 4ONN EJBNFUF5 QPMF, PQJPOBM JOTUBMMBUJPO LJU)%2004.20), BMJHONFOU GBDJMUBUFE CZ CVJMU-JO DPNQBTT;
- The available measurement options join together in one single, compact and lightweight instrument, the main variables of interest in weather stations;
- .0%#64-356 PVUQVU BMMPTX JOTUSVNFUOFUXPSLJOH.

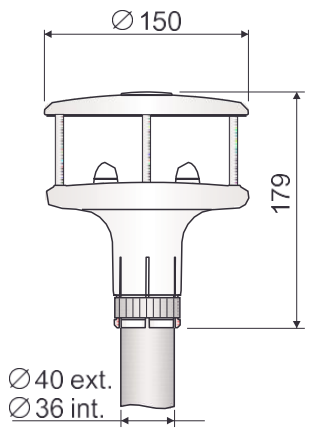
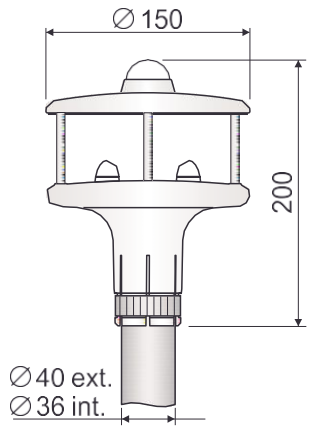
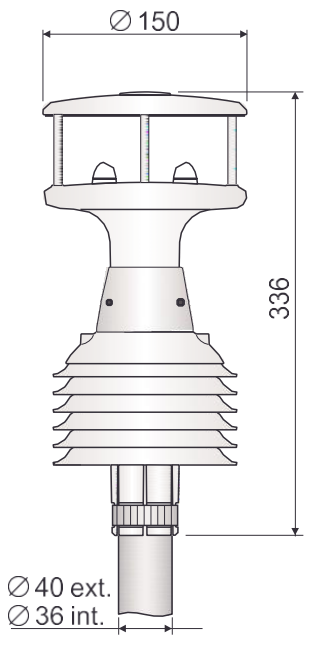
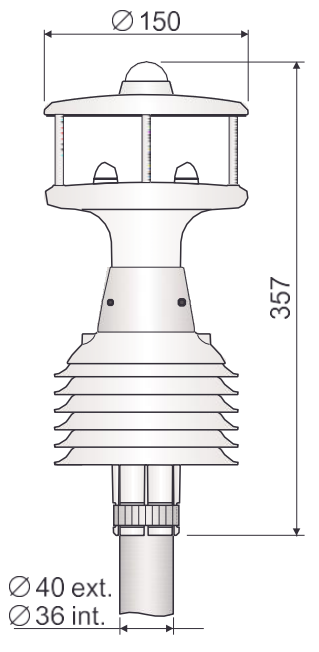
Typical applications:

- Weather stations
- &OWJSPONFOUBM NPOJUPSJOH
- Agriculture
- Sports facility
- Marine and Harbour applications
- Airports
-)7"\$
- \$POTUSVDUJPO
- 3FOFXBCMF FOF5HZ
- Building automation

Technical specifications:

Wind speed	
&NQMPZFE TFOTPS UZQF	Ultrasonic
.FBTVSJOH 3BOHF	0...60 m/s
3FTPMVUJPO	0.01 m/s
Accuracy	8IJDIFWFS JT HSFBUFS @ 0,2 N/T PS @ 2%, (0y35 N/T) @ 3% (> 35 N/T)
Wind direction	
&NQMPZFE TFOTPS UZQF	Ultrasonic
.FBTVSJOH 3BOHF	0y360i
3FTPMVUJPO	0.1i
Accuracy	@ 2i 3.4& GSPN 1.0 N/T
Compass	
&NQMPZFE TFOTPS UZQF	Magnetic
.FBTVSJOH 3BOHF	0y360i
3FTPMVUJPO	0.1i
Accuracy	@ 1i
Air temperature (option 17 is requested)	
&NQMPZFE TFOTPS UZQF	Pt100
.FBTVSJOH 3BOHF	-40y+60 i;\$
3FTPMVUJPO	0.1 i;\$
Accuracy	@ 0,15;\$ @ 0,1% PG UIF NFBTVSIF
Relative Humidity (option 17 is requested)	
&NQMPZFE TFOTPS UZQF	\$BQBDUJWF
.FBTVSJOH 3BOHF	0y100%3
3FTPMVUJPO	0.1%
"DDV5BDZ (!5 = 15y35 i;\$)	± 1,5%63 (0.90%3)), ± 2%3) (SFNB0JOH mFME)
"DDV5BDZ (!5 = -40y+60 i;\$)	± (1,5 + 1,5% PG UIF NFBTVSIF)%3)
Barometric Pressure (option 4 is requested)	
Principle	Piezoresistive
.FBTVSJOH 3BOHF	300...1100 hPa
3FTPMVUJPO	0.1 hPa
Accuracy	@ 0,5 I1B ! 20i;\$
Solar Radiation (option P is requested)	
&NQMPZFE TFOTPS UZQF	Thermopile
.FBTVSJOH 3BOHF	0...2000 W/m ²
3FTPMVUJPO	1 W/m ²
Accuracy	2 nd class Pyranometer
General features	
Power supply	10...30 Vdc
1PXFS \$POTVNQUJPO	26mA @ 12Vdc without heater, 6W with heater
Serial Outputs	34232, 34485, 34422 BOE 4%*-12
\$PNVVOJDBUJPO 1SPUDPMT	./.&, .0%#64-356, 4%*-12
Analog Outputs	2 analog outputs for wind speed and direction. Output type to be specified when ordering 4...20mA (standard), 0...1V, 0...5V and 0...10V (option 0...10V requires power supply 15...30Vdc)
&MFDUSJDBM DPOOFDUJPO	male connector M23 19 poles
Working temperature	-40y+60 i;\$
Dimensions)=179NN, @ =150NN (0%52.3%,)%52.3%4))=200NN, @ =150NN (0%52.3%1,)%52.3%14))=336NN, @ =150NN (0%52.3%17,)%52.3%147))=357NN, @ =150NN (0%52.3%117,)%52.3%1147)
Weight	BCPVU 1,H (GVMM WFSTJPO,)%52.3%1147)
Housing	1MBTUJDB NBUFSJBM. .FUBMMJDB QBSUT NBEF PG **4* 316
Protection degree	*166

DIMENSIONS (mm)

 <p>HD 52.3D Wind speed and direction.</p> <p>HD 52.3D4 Wind speed, wind direction and barometric pressure.</p>	 <p>HD 52.3DP Wind speed, wind direction and solar radiation.</p> <p>HD 52.3DP4 Wind speed, wind direction, solar radiation and barometric pressure.</p>
 <p>HD 52.3D17 Wind speed, wind direction, temperature and relative humidity.</p> <p>HD 52.3D147 Wind speed, wind direction, temperature, relative humidity and barometric pressure.</p>	 <p>HD 52.3DP17 Wind speed and direction, solar radiation, temperature, relative humidity.</p> <p>HD 52.3DP147 Wind speed, wind direction, solar radiation, temperature, relative humidity and barometric pressure.</p>

ORDERING CODES

HD 52.3D

R = IFBUFS PQUJPO
Blank = OPU IFBUFE

P = TPMBS radiation option (QZSBOPNFUFS)
4 = barometric pressure option
17 = relative humidity and temperature option
P4 = solar radiation and barometric pressure option
P17 = solar radiation, relative humidity and temperature option
147 = barometric pressure, relative humidity and temperature option
P147 = solar radiation, barometric pressure, relative humidity and temperature option
No characters = CBTJD WFSTJPO: wind speed and direction

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 supply 15...30Vdc).

HD52.3D...: 2 axes ultrasonic static anemometers for the measure of wind speed BOE EJSFUDUJPO, 6-7 \$BSUFTJBO DPNQPOFOOUT PG XJOE TQFFE, SFMBUJWF IVNJEJUZ BOE temperature (optional), global TPMBS SBEJBUJPO (optional) BOE CBSPNFUSJD QSFTTVSF (optional). "DPNQBT JT TVQQMJFE. 34232, 34485, 34422 BOE 4%*-12 TFSJBM PVUQVUT, NMEA, MODBUS-RTU and SDI-12 communication protocols. Two analogical PVUQVUT, GPS XJOE TQFFE BOE EJSFUDUJPO, GBDUPSZ DPOmHVSBCMF BNPOH 4@20N" (standard), 0@17, 0@57 PS 0@107 (to be specified when ordering). Heater option JT BWBJMBCMF. 1PXFS TVQQMZ: 10y307ED (15y307ED GPS 0@107 BOBMPH PVUQVUT). *OTUBMMBUJPO PO B QPMF: FYUFSOBM @ 40NN BOE JOUFSOBM @ 36NN. *OQVU XJUI. 23 19-pin male connector and M23 19-pin female flying connector. **Optional 5m or 10m cable with a connector on one side and open wires on the other.**



