Handheld anemometer – Meteorological station RVM96C



References

- Civil Protection of Slovenia
- DARS, Slovenian Higways Authority
- NATO (R&D Projects)
- China Scientific Hong Kong Ltd, China ...

with application for smart phones

Used WHENEVER other
instruments, due to their
design, weight, or dimensions,
are unsuitable
As for: Military, Coast guard, Firemen,
Oil platforms, Construction workers,
Sports, Airports ...

Handheld anemometer - Meteorological station RVM96C

Measurements of:

- wind speed and direction
- temperature
- · atmospheric pressure
- relative humidity
- · horizontal orientation

Higlights:

- built-in electronic compass; accurate wind direction data without need for instrument orientation
- illuminated LC display, capable of presenting current and historic data in numeric and graphic way
- · data transmission to Android OS device via bluetooth
- built-in calculations of mean values and extremes
- scalar or vector wind processing
- built-in storage of statistic data in the permanent internal memory (EEPROM) for 2048 intervals; data are not lost even when battery is empty or removed.
- serial data transmission to the external computer
- rechargable Li-ion battery.

Description:

Handheld anemometer – meteorological station RVM 96C is truly portable, easy to use instrument for basic field meteorological measurements. It is used in all cases, where other instruments, due to their design, weight, or dimensions, are unsuitable.

When in basic mode, RVM 96C shows on it's **graphic LCD**, depending on the selection, one of the following types of measured data:

- instant data
- · average data for the selected interval
- minimums for the selected interval
- maximums for the selected interval

Operation parameters are selected and set through the menu-organized comands. Settings and constants are stored in EEPROM, so that they are unchanged when instrument is switched off, even when battery is removed.

At the end of each data processing interval, mean values and extremes are stored with the time stamps in the EEPROM data storage. These data can be reviewed later on the instrument display or transmitted serially to the external computer. RVM 96C can store data for up to 1048 data processing intervals. This means, that data for 85 days are stored, provided that averaging interval is set to 1 hour. Data are stored on FIFO (first in – first out) principle.

System for measuring wind speed is optoelectronic, with 3-cup Robinson's cross. Direction is also measured digitally (6-bit Gray code), corrected automatically to the true wind direction by built-in electronic compass.

RVM 96C can measure wind speed in m/s, km/h, knots, or mph, and temperature in °C or °F.

Lid of a handle has standard ¼" nut to enable the attachment of the device to the standard photographic tripod.

General:

Dimensions 300 mm * 220 mm * 80 mm -30 °C ... +50 °Č Operating temperature Al closed case Environmental protection Display LCD, graphic 98x65, illuminated Connectors 3.5 stereo RS232 / 2,1x5.5 battery Keyboard Sealed, flat Power supply Built-in 3.6 V LI-ion battery Autonomy 30 h Power consumption voltage and current limiter Separate battery charger RS232*. bluetooth Data transfer Distances of data transfer RS232: 25 m max, bluetooth: 20 m max

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*default setting for RS232: Baud rate 9600, 8 bits, 1 STOP bit, no parity

Wind Speed and direction sensor:

Wind speed sensor	Robinson's cross, optoelectrobic stroboscope
Wind direction sensor	Wind vane, 6-bit optoelectronic Gray code encoder
Wind direction transduce	r 6-bit Gray code encoder, wind vane
Wind speed range	0 50 m/s
Wind speed constant	20 imp./m
Wind speed accuracy	+/- 0.5 m/s
Resolution of wind direct	on part +/- 5.6 °
Wind direction range	0° 360°
Wind direction accuracy	+/- 5.6°

Battery Charger:

Input voltage 220 ... 240 V, 50 ... 60 Hz AC Output voltage 6-13.8 V DC, nonstabilized

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Relative Humidity sensor:

Sensor combined temperature / RH sensor Type SHT75
Producer of sensor Sensirion
Operating principle Capacitive polymere
Measuring range 10 %...100 % RH
Accuracy +/- 3 % RH
Resolution 1% RH

Atmospheric Pressure sensor:

Producer of sensor	Intersema Sensoric SA
Туре	MS5534
Operating principle	piezzoresistance
Measuring range	300 mb1100 mb
Accuracy	+-1 mb
Resolution	01 mbar

Temperature sensor:

Sensor combined temperature / RH sensor Producer of sensor Sensirion Sensor type SHT75 Accuracy +/-1°C Measuring range -30 °C ... +50 °C

Feel free to call us!



AMES d.o.o., Na Lazih 30, SI-1351 Brezovica, Slovenia, Europe T: +386 1 365 71 01 F: +386 1 365 71 02 E: info@ames.si www.ames.si A case is provided for transport and storage of RVM 96C.

