

HANDHELD ANEMOMETER – METEOROLOGICAL STATION RVM 96C



Measurements of:

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

Highlights:

- 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
- 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
- rechargeable Li-ion battery.

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.

AMES d.o.o., Jamova 39, SI-1000 Ljubljana, Slovenia (seat)

Post address: Na Lazih 30, SI-1351 Brezovica

Tel: +386 1 365 71 01

Fax: +386 1 365 71 02

<http://www.ames.si> EMAIL: info@ames.si

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 1/4" nut to enable the attachment of the device to the standard photographic tripod.

A case is provided for transport and storage of RVM 96C.



TECHNICAL DATA

Dimensions	300 mm * 220 mm * 80 mm
Mass	0.6 kg
Operating temperature range	-30 to +50 dg. C
Protection	AI closed case
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	19 mA
Separate battery charger	voltage and current limiter
Data transmission	RS232, serial, adjustable speed, 8 bits, 1 STOP bit, no parity
Distance for serial data transmission	RS232: 15 m max

SENSORS:

Atmospheric Pressure

Producer of sensor	Intersema Sensoric SA
Type	MS5534
Operating principle	piezoresistance
Measuring range	300 – 1100 mbar
Accuracy	+/- 1 mbar
Resolution	0.1 mbar

Wind Speed and Direction

AMES d.o.o., Jamova 39, SI-1000 Ljubljana, Slovenia (seat)

Post address: Na Lazih 30, SI-1351 Brezovica

Tel: +386 1 365 71 01

Fax: +386 1 365 71 02

<http://www.ames.si> EMAIL: info@ames.si

Wind speed sensor	Robinson`s cross, optoelectronic stroboscope
Wind direction sensor	Wind vane, 6-bit optoelectronic Gray code encoder
Wind speed measuring range	0 to 50 m/s
Speed constant	20 imp./m
Wind speed accuracy	+/- 0.5 m/s
Wind direction accuracy	+/- 5.6 deg.

Relative humidity

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

Temperature

Sensor	combined temperature / RH sensor
Producer of sensor	Sensirion
Type	SHT75
Measuring range	-30 – +50 °C
Accuracy	+/- 1 °C
Resolution	0.1 °C

Battery Charger

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

AMES d.o.o., Jamova 39, SI-1000 Ljubljana, Slovenia (seat)

Post address: Na Lazih 30, SI-1351 Brezovica

Tel: +386 1 365 71 01

Fax: +386 1 365 71 02

<http://www.ames.si> EMAIL: info@ames.si