

## HD9906.51



### HD9906.51 HEATING AND VENTILATION UNIT

The heating and ventilation unit HD9906.51 is meant to be used with solar radiation sensors (pyranometer, pyrgeometer and radiometer) and can be used outdoor under any weather conditions.

The ventilation of the instruments increases the precision of the measures by making the pyranometer's temperature uniform, in particular it avoids the deposit of dew and frost on the optical parts of the sensors and reduces the off-set of type A (present in pyranometers and pyrgeometers) caused by the cooling of the dome with respect to the instrument's body. It is possible to use the heating under extreme environmental conditions so to prevent ice formation on the dome of the pyranometer (when the heating is on, you should consider that the off-set of type A may increase, therefore we suggest the use of the heating only for the time necessary to remove snow or ice formed on the instrument's surface).

The HD9906.51 unit can be used with LPPYRA02 and LPPYRA10, with the pyrgeometer LPPIRG01 and the radiometers LPPHOT02, LPUVA02 and LPUVB02.

Technical specifications	
Ventilation power supply	12 Vdc $\pm$ 10% / 5 W
Heating power supply	12 Vdc $\pm$ 10% / 7 W
Operating conditions	-30 °C...+70 °C / 0...100 %RH Max. altitude 3000 m
Cable length	5 m standard (other lengths on request) Ending with free wires

### Installation and assembly of the ventilation unit

In order to install the pyranometer on the ventilation unit, it is necessary to work under the following procedure:

1. Loosen the three nuts that hold the bell
2. Remove the HD9906.51 bell
3. Remove the white screen by the pyranometer
4. Remove the adjusting screws from the body of the pyranometer (if necessary, leveling will be performed by adjusting the screws on the HD9906.51.)
5. Fix the pyranometer to the ventilation unit by using the two M5 screws
6. Make sure that the cable of the pyranometer has been properly connected
7. Reassemble the HD9906.51 bell into place and tighten the screws

The pyranometer is fixed to ventilation unit by 2 screw. To allow an accurate reading of ground solar radiation is necessary place the HD9906.51 parallel to the ground, this can be done using the bubble on the ventilation unit.

The electrical connections of the HD9906.51 are done via the cable already connected to the terminals located under the base. There are two pairs of terminals: a pair for ventilation and a pair for heating. The polarity of the fan must be respected, otherwise the flow of air is in the opposite direction to that expected (from bottom to top).

Figure 1 shows the correspondence between terminals and cable wires.

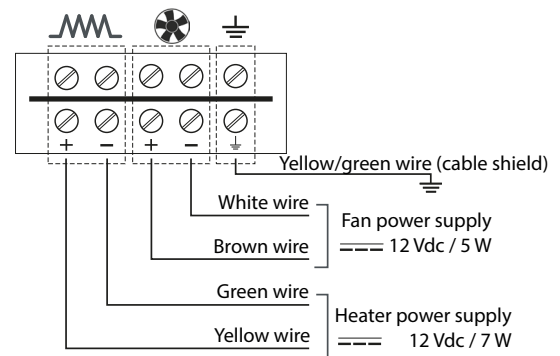
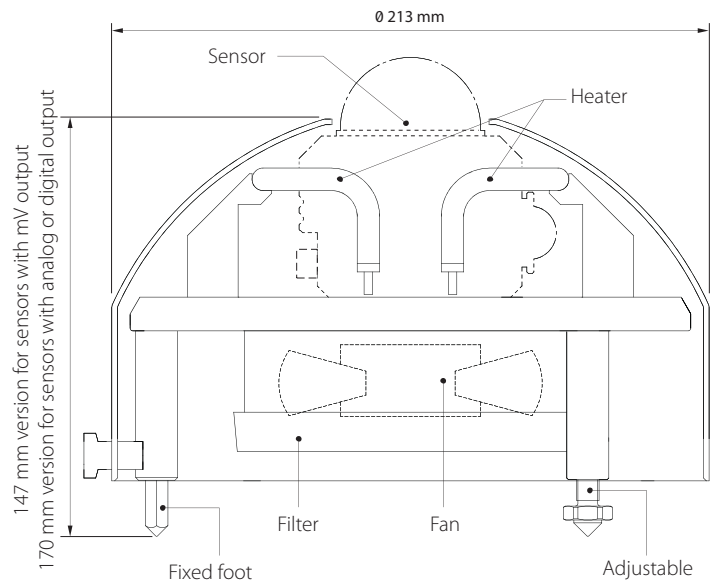
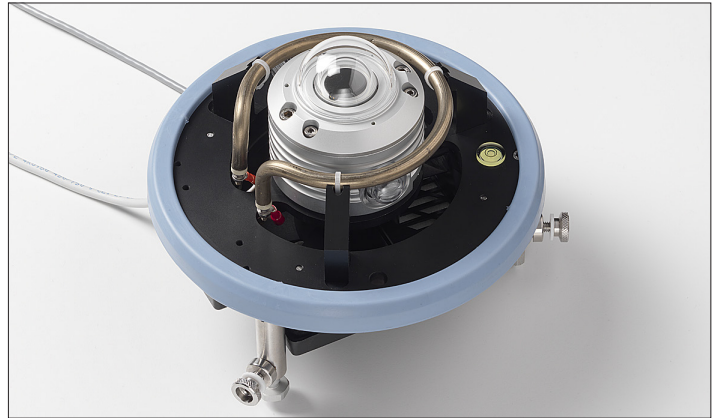
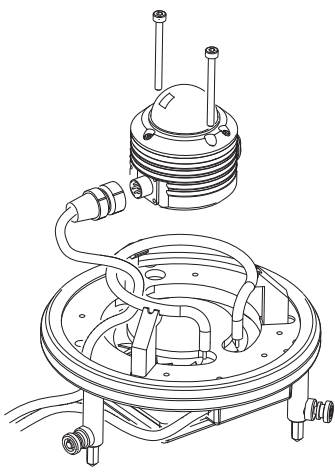
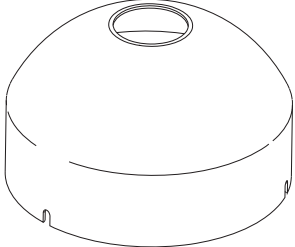
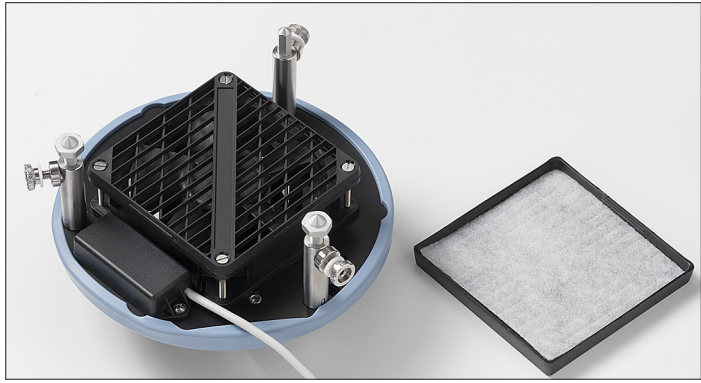
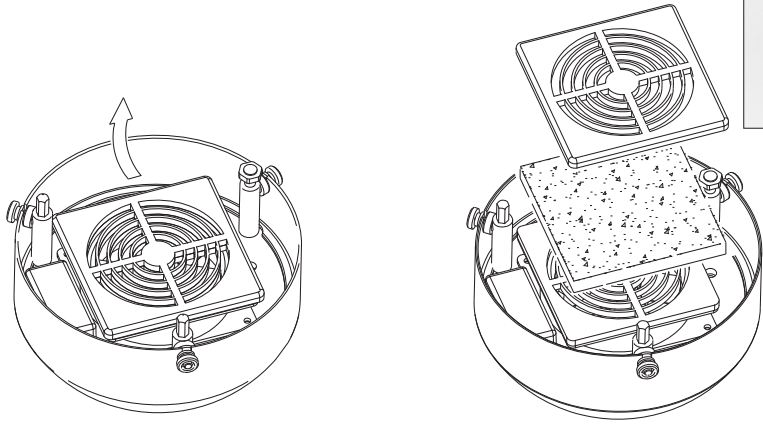


Fig. 1 - correspondence between terminals and cable wires.

The fan model is equipped with a filter that must be periodically checked and replaced if dirty.



How to remove the filter for cleaning



Installation steps

