

## **DEW RECORDER**

**Kessler Type**



The dew recorder registers the precipitation of dew, the quantity of which depends on the temperature, the humidity, and the movement of the air, as well as on the temperature of the receiving surface which itself is influenced by its own radiation. A horizontally arranged plate of metallic serves as collector. The size of its effective surface which includes upper and lower side amounts to 110 cm<sup>2</sup>.

Owing to its rather trifling volume and low heat capacity, the plate is subject to a maximum super cooling in comparison to the air surrounding it and, in consequence, also to a maximum precipitation of dew. Like the formation of the precipitation, the subsequent re-evaporation is recorded, too. The plate, together with an interposed thermal insulation, is fitted to the one end of a lever, the other end of which carries the recording pen. The lever is clamped to the middle of a wire of corrosion resistant high elastic bronze, and serves as an axis. Its torsion counter balances the load caused by the dew. Thus, the dew is weighed, and the instrument may be recalibrated by means of a set of small weights. The full deflection of the pen is equal to a quantity of dew of about 6 gram. In order not to falsify the result of the recording by the dew precipitated on the lever, a dripping device has been provided. A collecting contrivance underneath the plate secures that nothing of the quantity of dew about to be measured may get lost.

The dew recorder may also be used for recording the formation of hoar frost, as well as the precipitation of mist and drizzling rain. An oil damping has been provided to avoid disturbances of the recording by gusts. The damping is adjustable for permitting an easy adaption of its effectiveness to the changing conditions of more or less exposed installation. It can be kept shut easily during transportation. The instrument may be dismantled and reassembled without difficulty. All parts are of corrosion resistant material, and its rugged design allows for an operation by inexperienced persons, too.

**No.**

**64a**      **Dew Recorder**      Kessler Type  
recording drum: 93.3 mm diameter x 93 mm height  
time of revolution: 1 day or 1 week\*)  
paper feed: 11.2 mm per hour or 40 mm per day  
dimensions: 285 mm length x 130 mm depth x 190 mm height  
weight: 3.4 kg

**Gratis Accessories**

certificate of calibration  
1 set recording charts (no. 620-2 for 1 day, 624-2 for 1 week)  
1 spare cartridge pen, violet

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\*) A clock for changing the time of revolution from 1 day to 1 week is to be had at a surplus.

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