DEW RECORDER

No. 64a

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 cm².

Owing to its rather trifling volume and low heat capacity, the plate is subject to a maximum supercooling 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 thermical 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 counterbalances 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 the 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.

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

Accessories (incl.)
certificate of calibration
1 set of 100 recording charts (no. 620-2 for 1 day, 624-2 for 1 week)
1 fiber pen, violet (No. 78wf)