



## Weather Instruments

### Metrological set (ELP.104.206)

The set includes brass rain guage of 75 mm. diameter, receiving bottle of glass capacity 45 mm. of rainfall, rain guage measure capacity 12 mm. of rainfall graduated in millimeters, maximum and minimum thermometer mounted on metal scale and magnet for resetting and a wet bulb thermometer mounted on metal scale. Screen is of hard wood painted white with hinged front and ventilated side. Over all dimensions 33 x 33 x 12 cm. ( height x width x depth)

### Wind vane, a balanced vane (ELP.104.207)

With phosphorbronze bearings mounted on steel pivot. Pillar terminates in 1 inch BSP ( male) thread, complete with lock - nut . Height 38 cms. With mark NEWS points.



### Hygrometer, Wet & dry Bulbs, Mason's (ELP.104.208)

Comprising two -10 to +55 c thermometers fitted on a metal scale. One thermometer bulb is covered with muslin which is kept moist by being connected to a reservoir of water . Mounted in a white enamelled case with hinged cover.



### Whirling Hygrometer (ELP.104.209)

The ventilated type of hygrometer gives greater accuracy for humidity determinations and is particularly useful for measuring local differences in humidity. There are two thermometers mounted in metal case, one having a wick dipping into a water reservoir at the end of the frame. The thermometers are stem engraved with lens fronts for easy reading. Range -5 to +50 C x 0.5 C.



### Hair Hygrometer (ELP.104.210)

With anodised scale 0 to 100 x 1% r.h in metal case.

### Barometer Aneroid (ELP.104.211)

With 100 mm dial graduated 28 to 31 inch of mercury and 960 to 1060 millibars. With plated bezel, cover glass and index polished wooden base approx. 16 cm. diameter.



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### Barometer Aneroid demonstration (ELP.104.212)

Instrument construction of this Barometer is like Cat. No. ELP.104.211 but enclosed in a transparent synthetic case for demonstration purpose. Air tight sealed all round, a pressure bulb is provided to force the movements for educative demonstration.



### Rain gauge, Automatic (ELP.104.213)

Rain Gauge Automatic A Clock type ISI NO. 5255-1969



### Rain gauge Symon's (ELP.104.214)

It consists of a cylinder made from galvanized iron sheet with a funnel made from metal sheet with collar which fits into the top and drains into an inner cylinder. When the inner cylinder fills the vessel collect the overflow. Complete with glass measure.



### Rain gauge Symon's (ELP.104.215)

Same as Cat No. ELP.104.214 but made of copper and polished. Complete with glass measure.

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**RAIN GAUGE STANDARD NON RECORDING IN FIBERGLASS**  
(ELP.104.216)



Non recording Rain Gauges are manufactured as per IS:5225 : 1969. Rain Gauge is manufactured from non corrosive fiber glass reinforced plastic container. It consists of collector assembled with Gun-metal Ring, Funnel, Locking Rings and Base. The Rain Gauge is supplied with 4 liter/2 liter plastic bottle and glass measuring cylinder. Rain Gauges are available in two different capacities 100 sq. cms collection area and 200 sq. cms collection area.

Rain measuring cylinder also available made for material on specific requirement.



### SELF RECORDING RAIN GAUGE (ELP.104.217)

This Rain Gauge is manufactured as per IS:5235:1969 and manufactured from fiberglass reinforced plastic which is non corrosive Container is assembled with Gun-metal Ring and Locking arrangements. Syphoning System and Recording arrangements are manufactured from Brass. Whereas the High torque clock is of unique Electronic design which is operated on 4 x 1.5 V. DC Dry Cell and economically uses the power consumption alternately mechanical clock winding also with SRRG. Available as special requirement.

Available capacities

.01 10 mm.

.02 25 mm.



### STEVENSON SCREEN (ELP.104.218)

These screens are manufactured as per IS:5948:1970 and are suitable for housing thermograph, hydrograph, dry and wet bulb, Thermometer and Maximum-Minimum Thermometer. Basically these are manufactured from best quality Indian wood and accurately assembled with side louvers.

.01 Small Size

.02 Large Size



### SUN-SHINE RECORDER (ELP.104.219)

This Sun-Shine Recorder is manufactured as per IS: 7243:1974. Basic Main Components are bowls which are manufactured from BRonze as per Is:306:1968 and are precisely machined and assembled. Base of white marble. The sphere bowl is made uniformed and well annealed and air bubbler free glass having good surface finish. The instrument is always supplied with one year recording graph, and standard stanciled curve for comparision.

### OPEN PAN EVAPORIMETER (ELP.104.220)



This Pan Evaporimeter is manufactured as per IS:5973 : 1970. The Pan is manufactured from pure copper, duly tinned and epoxy pointed and tested for water leakproofness. The stilling well and thermometer clamps are manufactured from Brass. This is supported on wooden platform and covered with rainforced chickon, Measuring Jar is manufactured from transparent Acrylic also available is bran. This Pan evaporimeter is also available in galvanized Iron as per customer's requirement.



#### **THERMOGRAPH (ELP.104.221)**

This instrument is manufactured as per IS:5901 - 1970. The instrument consists of a temperature sensitive Bimetallic element, in the form of S flat sript or HLIX, connected by a system of Magnifying linkage to a recording pen moving on a chart which is fixed on a drum driven by clockwork available with mechanical clock.



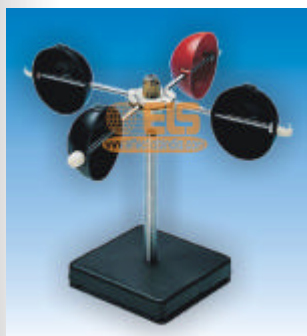
#### **HYGROGRAPH (ELP.104.222)**

This instrument is manufactured as per IS: 5900-1970. The humidity sensor consists of a bundle of Human Hair held between two adjustable jaws, the whole assembly being mounted on a hair movement plate. The variations with length of the hair stands due to changes in the relative humidity are measured by the displacement of the centre of the hair strands transmitted by a lever and a pair of cams to the pen arm so that the movement of the pen is a linear function of the relative humidity. Available with mechanical clock.



#### **THERMO HYGROGRAPH (ELP.104.223)**

The Thermoygraph is intended to measure and to record air temperature and relative humidity verses time on a double field paper recorder chart. It is used in Meteorological service, as well as in drying rooms, stores, measuring rooms etc. in order to measure air temperature the metal Thermal Expansion Effect has been utilized. The sensor is a thermobimetalic strip consisting of two layers of Alloys having different co-efficient of expansion, one end is fixed and other end connected to the linkage. Bending stresses arising within the strip due to temperature variations results in deformation of the strip & alter the position of its free end. The displacement is transmitted on to the writing pen by means of linkages and resulted in a diagram being platted on the lower field of the recorder chart. Similarly to measure the relative air humidity and hyroscopic properties of prepared human hair band whose one end is fixed in a holder and other end is connected to a linkage variation in length of human band is transmitted on to writing pen by linkages. The Motion of which results in a diagram being plotted on the higher field of the recorder chart. Also available with mechanical clock.



#### **Anemometer Demonstration (ELP.104.224)**

A Portable Cup anemometer which demonstrates the force exerted by flowing wind. By counting the revolutions of the anemometer students can record the wind speed.



#### **Anemometer (ELP.104.225)**

A Portable Cup anemometer which gives direct readings of wind speed in either Km/hr Beaufort scale, m/s or knots. The vertical spindle carries three plastic cups, which rotate on ball bearing and cause the deflection of two pointers across the paired scales. Scale 0 to 120 km/hr. or 0 to 12 beaufort or 0 to 35m/s, or 0 to 60 knots.