



# MESUR HAND INSTRUMENT

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## Combined EC, pH and temperature measuring instrument

### Highlights

- One hand operation
- Temperature compensation
- Exact pH measurement
- Well suited for transport

Mesur is a combined measuring instrument for EC, pH and temperature. This conveniently-sized unit was developed for daily use in greenhouses, nurseries, turf fields, and other outdoor applications. Mesur is an updated version of the well-known Senmatic EC and pH hand instruments of which more than 10,000 pieces have been sold.

### Simple operation and unique design

Mesur has our well known distinguished and timeless design, and it has six operational buttons that operate with one click.

This development enhances performance over the older models that require continuous manual depression to obtain a reading. The buttons are placed so that the unit can be operated with one hand on the control panel at a time.

When a button is suppressed, Mesur will be powered for operation. If the unit is idle for more than one minute, the unit will turn off automatically to save battery power. Mesur reliably shows conditions of low battery voltage, alerting when its battery must be replaced.

This unit is a durable instrument built to withstand a humid environment. It is suited for normal daily use in the greenhouse, nursery, or outdoor climate. EC values are normally read to one decimal point. Mesur, however, also has the possibility to obtain readings to two decimal points for EC readings lower than 2.5 mS.

### Memory

Mesur has a built-in memory to store the most recent EC, pH, and temperature values. This is especially practical when measuring under difficult conditions.

### Temperature compensation

EC readings from Mesur are temperature-compensated. The unit accounts for the influence of solution temperature on the EC value and this is always shown/converted into the reference temperature. The EC value can be compared with previous measurements.



## SPECIFICATIONS / MESUR HAND INSTRUMENT

### Parameters

#### ***Instrument alone***

Dimensions H x W x D	130 x 70 x 25 mm (5 x 2 ¾ x 12")
Weight	250 g (0.55 lb)

#### ***Instrument incl. carrying case***

Dimensions H x W x D	250 x 325 x 55 mm (9 x 12 ¾ x 2")
Weight	1 kg (2.2 lb)

### Electrical

#### ***EC***

Measuring range	0 - 14 mS (temperature compensated)
Accuracy	±0.1 mS (5 - 30° C / 41 - 86° F)
Resolution	0.1 mS (0.02 mS optionally by EC < 2.5 mS)

#### ***pH***

Measuring range	0 - 14 mS (temperature compensated)
Accuracy	±0.1 mS (5 - 30° C / 41 - 86° F)
Resolution	0.1

#### ***Temperature (liquid)***

Measuring range	0 - 60° C (32 - 140° F)
Accuracy	±0.5° C (±1° F)
Resolution	0.5° C (±1° F)
Battery	9 V, type 6LR61
Working life	50 hours. Mesur has automatic indication of low battery voltage.

#### ***Sensors***

EC electrode	Includes a built-in Senmatic thermistor
pH electrode	Standard combination electrode

A new feature of Mesur is that it compensates for the temperature dependence of the pH sensor. The pH measuring is therefore more exact with Mesur than with ordinary pH meters.

### Calibration

Calibration of Mesur is necessary to obtain accurate readings. Calibration of the EC electrode is achieved using a buffer solution with known EC values. The pH electrode is calibrated with a control solution of pH 7.0 and with a predetermined acidic or basic calibration liquid.

### Complete delivery

Control liquids for calibration of EC and pH, if applicable, are enclosed with each shipment of Mesur. Additional calibration liquids are available from Senmatic. Mesur is delivered in a practical and durable hard plastic case with sufficient space for all control liquids and sensors. The case is well suited for transport throughout the nursery or field.

### Mesur is delivered in two models

Our deluxe model has EC, pH, and temperature measuring facilities. Also available is a unit measuring EC and temperature alone.

#### **Control liquids**

EC control liquid	2.00 mS ±0.02 mS at 25° C (77° F)
pH 7 control liquid	7.00 pH ±0.01 pH at 25° C (77° F)
pH 4 control liquid	4.01 pH ±0.01 pH at 25° C (77° F)

### Distributor:

### Head office:

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