

Device for light transmission measurement in automotive glass

Elhos Glass Meter

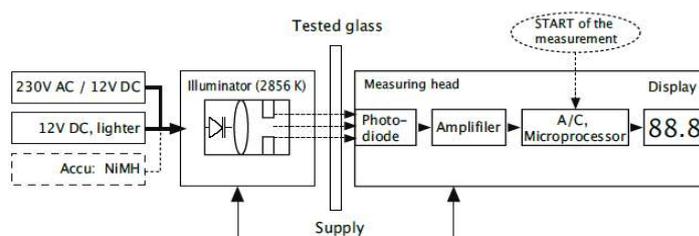
Elhos Glass Meter is a modern small-size measuring device, manufactured with the use of microprocessor technology enabling the recording of several measurements. It is used to measure the transmission coefficient – i.e. the ratio of a light flux going through the glass to the value of the flux that incidences on it – in all kinds of glass installed in road vehicles.



Construction

Elhos Glass Meter is composed of the following components:

- illuminator equipped with the light source with colour temperature $2856\text{ K} \pm 50\text{ K}$ and an optical system,
- measuring head equipped with radiation detector (light transmission measuring device) and display enabling to read out the results of the measurement,
- Spiral cable connecting the illuminator with the head,
- power leads or set of batteries.



The device has a built-in WiFi module for communication with a PC computer in order to print the protocol and archive the measurement results.

Universal use

The solid construction of the cover, fully digital calibration, short measurement time and ease of use (one person) make the Elhos Glass Meter very well suited to work both in Vehicle Inspection Stations and in the open, both during the day and at night, e.g. during inspections authorized road services.

Measurement

The measurement of the light transmission coefficient is composed of three major steps:

- Step 1 – switching the device on,
- Step 2 – Calibration (CAL) ending with the device entering the stand-by mode (got),
- Step 3 – having applied the device to the glass – measurement (P) ending with the display of the result.



Switching on



Calibration



Stand-by



Measurement



Result of the measurement

Advantages

Two main features distinguishing Elhos Glass meter, are:

- the possibility of cordless power supply (batteries) – not available in many other devices,
- maximally short measurement time (calibration and measurement phases last 5 seconds each).

General technical data

Led

Colour temperature

Light source

2856 [K] ± 50 [K]

Detector

Spectral-response characteristic corresponding to the relative curve of spectral sensitivity in the CIE1931 standard for photopic vision

Measuring track

Measured value

light transmission coefficient

Measuring range

0 ÷ 100 [%]

Indication resolution

0,1 [%]

Standard absolute error

In the whole measuring range for quasi- colourless glass ±2 [%]

In the whole measuring range for glass in four basic colors ±5 [%]

Supply [available options]

From the lighter socket

Power supply device 230 V AC / 12 V DC

Set of batteries

Dimensions

Illuminator

φ 65 x 140 [mm]

Dtector

φ 65 x 116 [mm]

Device weight

720 [g]