

# “TKA-KEEPER”



## Main technical characteristics

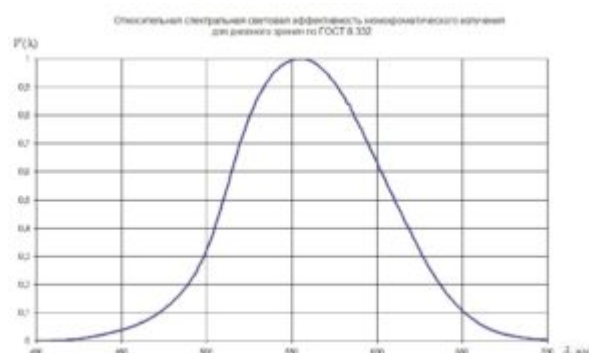
|                                                           |                     |
|-----------------------------------------------------------|---------------------|
| <b>Illumination</b> measurement range                     | 10 ÷ 200,000 lx     |
| Basic relative error of illumination measurements         | ± 8.0%              |
| Range of <b>indications of irradiance</b> UV- (A + B)     | 1 ÷ 200,000 mW / m² |
| <b>Measurement</b> range of <b>irradiance</b> UV- (A + B) | 10 ÷ 40,000 mW / m² |
| Basic relative error of irradiance measurements           | ± 10.0%             |
| <b>Air temperature</b> measurement range                  | -30 ÷ +60 °C        |

|                                                                                                                                                                                                                                                           |                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Basic absolute error of temperature measurements                                                                                                                                                                                                          | $\pm 0.2^{\circ}\text{C}$                                                                                        |
| Limits of additional absolute error of air temperature measurements at air temperature, $^{\circ}\text{C}$<br>from -30 to -10 inclusive<br>above -10 to +15 inclusive<br>above +25 to +45 inclusive<br>above +45 to +60                                   | $\pm 0.3^{\circ}\text{C}$<br>$\pm 0.1^{\circ}\text{C}$<br>$\pm 0.1^{\circ}\text{C}$<br>$\pm 0.3^{\circ}\text{C}$ |
| Measurement range of <b>relative air humidity</b>                                                                                                                                                                                                         | 5 ÷ 98%                                                                                                          |
| Basic absolute error of relative humidity measurements                                                                                                                                                                                                    | $\pm 3.0\%$ rel. ow.                                                                                             |
| Limits of the additional absolute error of relative humidity measurements when the air temperature changes by every $10^{\circ}\text{C}$ in the range from +10 to +60 $^{\circ}\text{C}$                                                                  | $\pm 3.0\%$ rel. ow.                                                                                             |
| The limits of the additional relative error of the device when measuring optical quantities, due to a change in the sensitivity of the photometric head when the air temperature in the measurement zone changes for every $10^{\circ}\text{C}$ (no more) | $\pm 3.0\%$                                                                                                      |

## Dimensions

|                                           |                  |
|-------------------------------------------|------------------|
| – signal processing unit (no more)        | 130 x 70 x 30 mm |
| – photometric head with a probe (no more) | 230 x 48 x 55 mm |
| Device weight (no more)                   | 0,4 kg           |
| Battery – Krona battery standard size     | 9 in             |

The difference in the function of the relative spectral sensitivity of the photodetector of the Luxmeter is corrected by a system of light filters to match the function of the relative spectral luminous efficiency of monochromatic radiation for daytime vision  $V(\lambda)$  according to GOST 8.332.



The effective reference plane of the Luxmeter coincides with the front plane of the cosine attachment of the photodetector

## Substantial benefits

It combines the functions of a universal light meter, a UV radiometer with increased sensitivity, and a temperature and humidity meter. Faster response, improved performance, high precision platinum temperature sensor, low power consumption.

“TKA-KHANITEL” is a multifunctional measuring complex for research and

operational control of microclimate parameters affecting objects of socio-cultural and artistic-historical significance in museums, archives, warehouses, for use in cultural and art institutions, school and local history clubs.

- [Operation manual "TKA-KEEPER"](#)
- [Factory calibration in accordance with MP-242-1969-2016, approved by the State Research Center for SI "VNIIM im. DI. Mendeleev "November 26, 2016](#)