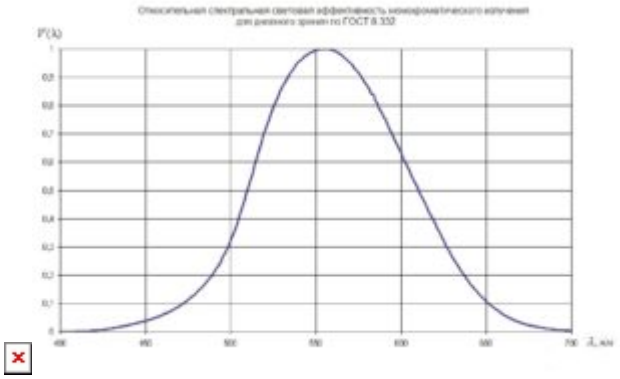
Luxmeter + Pulsemeter “TKA-PKM” (08)

Main technical characteristics

Illumination measurement range	10 ÷ 200,000 lx
Limits of the basic relative error of illumination measurements	± 8.0%
Including the limits of the permissible relative error caused by the nonlinearity of the light characteristic	± 3.0%
Including the limits of the permissible relative error caused by the deviation of the relative spectral sensitivity from the relative spectral luminous efficiency	± 5.0%
Including calibration limits for source A	± 3.0%

Including margin of error due to the spatial response of the photometric head	± 5.0%
Illumination ripple coefficient measurement range	1 ÷ 100%
Limits of permissible basic relative error of illumination pulsation measurements	± 10.0%
Including graduation limits	± 3.0%
The limits of the additional relative error of the device when measuring optical quantities, due to the change in the sensitivity of the photometric head when the air temperature in the measurement zone changes by every 10 ° C in the range from -30 ° C to 15 ° C and from + 25 ° C to 60 ° C	± 3.0%

The difference in the function of the relative spectral sensitivity of photodetectors is corrected to match the function of the relative spectral luminous efficiency of monochromatic radiation for daytime vision in accordance with GOST 8.332.



Significant advantages of the device Luxmeter “TKA-PKM” (08) over analogues

The device has a unique ability to determine the illumination values □□in real time and calculate the exact values □□of the illumination pulsation coefficient according to a special program protected by the Certificate of Official Registration of the Computer Program No. 2003612397 . The device implements an integral method for calculating the average illumination value for calculating the illumination pulsation coefficient. The readings on the device screen are calculated once a second, while the signal from the photosensor is digitized at a frequency of 3 kHz, the processor clock frequency is 4 MHz, an active low-pass filter at 1000 Hz is in front of the 12-bit ADC, a digital filter is implemented to suppress “reflections” during digitization LF at 400 Hz.
The device Luxmeter + Pulsemeter “TKA-PKM” (08) can be connected via a half-duplex synchronous serial interface USB – virtual COM-port (under Windows XP / 7/10) to a computer or other controller. The device transmits information to the serial port in text format using OEM 866 encoding, with standard port settings (9600 bps, 8 bits, no parity, 1 stop bit).
To receive data, you can use any terminal program under Windows (HyperTerminal, terminal v.1.9b, Putty); to receive data on Android, you need a USB-hosta, a USB HARDWARE connection and a terminal program with FT232RL support. Simple dump format and CDC – the device allows you to use any terminal program on various operating systems.

USB Am-Bm cable and data carrier with PC software are not included in the standard package.

Why is it worth buying the device Luxmeter + Pulsemeter “TKA-PKM” (08)?

- The device combines a light meter, which performs the function of calculating the illumination level, and a pulse meter, which is necessary to establish the light pulsation coefficient.
- Direct measurements do not require a measurement procedure and are carried out according to the operational documentation for the used measuring instrument.
- Convenient body and intuitive interface.
- Possibility of connecting to a computer for data transfer.
- The price for a photometer is relatively low, which fully correlates with excellent quality.

If you need a high-quality device that gives the most accurate measurement values, then a photometer, the price of which also includes verification, is what you need. It is not only profitable to buy photometers on our website, but also quickly, and you can order either one device for private measurements or a batch of devices for industrial purposes.

Measuring the illumination created by a radiation source, as well as calculating the ripple coefficient, are parameters that are determined not only during lighting checks in workplaces, public institutions, industrial warehouses and workshops, but also at home. To do this, you need a special device: Luxmeter + Pulsemeter “TKA-PKM” (08) is a device that determines both of these parameters. Such devices are called photometers, and their functions affect the area of □□radiation of various kinds. You can buy a light meter, which will be not only high-precision, but also high-quality and affordable, on our website.