

# MW700 PRO

## Budget LUX Portable Meters for fast and reliable results

The microprocessor-based **MW700 PRO** is a portable Lux meter designed to perform light measurements. **MW700 PRO** has a small, ergonomic and light case design. Other features include large and easy to read LCD and long battery life.

These handy and ergonomically designed portable meters are ideal for anyone working on a low budget and still requires fast and reliable measurements. These portable meters are suitable for a wide range of applications, such as Educational, Agriculture and Horticulture, as well as water and environmental analysis.

Both models are supplied with a light sensor connected to the meter that measures from 0 to 50000 Lux.

Average indoor lighting ranges from 100 to 1000 Lux and average outdoor sun lights about 50000 Lux. Lux is a unit that indicates the density of light that falls on a surface.

The light is necessary for the development of the plants. In fact, it is necessary a sufficient contribution of light in order to favor the photosynthesis and the closing of the plants.

The supplement of light by means of lamps electrical workers is the method simpler and economic in order to bring the necessary light to the plants.

The human eye is sensitive only to blue, green, and red light, so in calculating the Lux falling on an object, only the light that the human eye sees is counted. When only infrared light falls on an object, the Lux is counted as zero since our eyes see nothing. Mathematically, a spectral weighting function becomes convolved with the actual illumination spectrum to calculate Lux exactly.

This is the formal definition of Lux and it makes Lux an unusual unit of measure.

Still, Lux can be thought of as a way of measuring light in terms of what our eyes perceive. The metric unit of measure for luminance of a surface. One Lux is equal to one Lumen per square meter. One Lux equals 0.0929 footcandles.



Specifications	MW700 PRO
Range	0.000 to 1999 Lux 2000 to 19999 Lux 20000 to 50000 Lux
Range setting	manual through key buttons
Resolution	1 Lux 10 Lux 100 Lux
Accuracy	±6% of reading ±1 digit
Peak wave length	560 nm
Sensor Type	silicon photodiode
Sensor Sensitivity	100 scotopic Lux
Sensor stability	±2% change per year (in the first two years)
Environment	0 to 50°C / 32 to 122°F; max RH 95%
Battery type	1x9V (IEC 6LR61) alkaline
Battery life	approximately 150 hours of continuous use
Auto-off	after about 5 minutes of non-use
Packaging dimensions	212 x 145 x 67 mm
Packaging weight	400 g

### Range keys

Press one of the three "Range keys" to select the proper scale according to the intensity of the light.



### Ordering Information

MW700 PRO is supplied complete with 9V battery and instructions in a carton box.