ILLUMINATION SENSOR

FEATURES:

- Outdoor daylight monitoring
- Illumination engineering
- Lighting control systems

The illumination sensor is designed for routine measurement of illuminance. It is especially suitable for outdoor daylight monitoring, illumination engineering, and lighting control systems. The illuminance meter can be used under all weather conditions.

The sensor consists of a photodiode sensor and filter. The specially designed filter provides a spectral response equal to that of the average human eye, and the photodiode sensor has a voltage output that is proportional to the incoming radiation. Also, due to the unique design of the diffuser, its sensitivity is proportional to the cosine of the angle of incidence of the incoming radiation, allowing for accurate and consistent measurements.

The illumination sensor is easy to use. It can be directly connected to a voltmeter or a data logger, such as Climatronics’ IMP-850/IMP-860 series data loggers. Direct readout in Lux (lx) can be derived from the measured voltage divided by the calibration coefficient.
SPECIFICATIONS

Sensitivity (nominal): 10 mV/100 kLux
Spectral response: Equivalent to the human eye response
Temperature range: -30°C to +70°C
Response time: Less than 0.1 sec
Range: 0 – 200 kLux
Temperature dependence: < ± 0.2 %/°C
Directional error: < 10% (up to 80 degrees)
Spectral range: 400 – 700 nm