

Universal Photometer S5



The Hagner S5 Universal Photometer is the fifth generation of Hagner™'s Universal Photometers. (Actually it is the sixth but the first one was built with cadmium sulphide diodes and is therefore not included in the S-series.) The S5 is though the first digital version. As its precursors it of course measures luminance as well as illuminance but it can also save readings in its memory, directly present correct readings on the display when using any of Hagner™'s special detectors and be set for metric as well as imperial units.

Universal Photometer S5

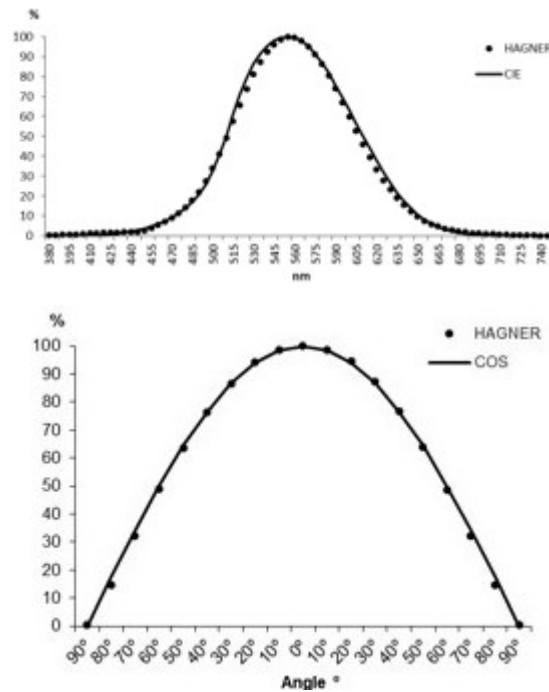
The Hagner Universal Photometer, model S5, is an easy to use precision instrument with automatic zeroing function for measurement of

Luminance $1^{\circ} 0.01 - 200,000 \text{ cd/m}^2$ (standard design) and

Illuminance $0.01 - 200,000 \text{ lx}$ (standard design).

Angles and solid angles can also be measured, using the scales in the viewing field.

Other photometric dimensions can be measured with the use of special detectors.



Instrument Data for S5

Dimensions: 216 x 108 x 54 mm.

Weight: 0.8 kgs, x.x kgs with carrying case.

Temperature range: -5°C - +50°C.

Accuracy: Better than $\pm 3\%$ for all common light sources and daylight (± 1 in last digit).

Measurement functions: Measurement of luminance: 0.01-199,900 cd/m²

Measurement of illuminance: 0.01-199,900 lux

Lowest detectable value: 0.01 cd/m² or lux (+/- 1 digit).

Determination of angles etc.

Measurement with special detectors.

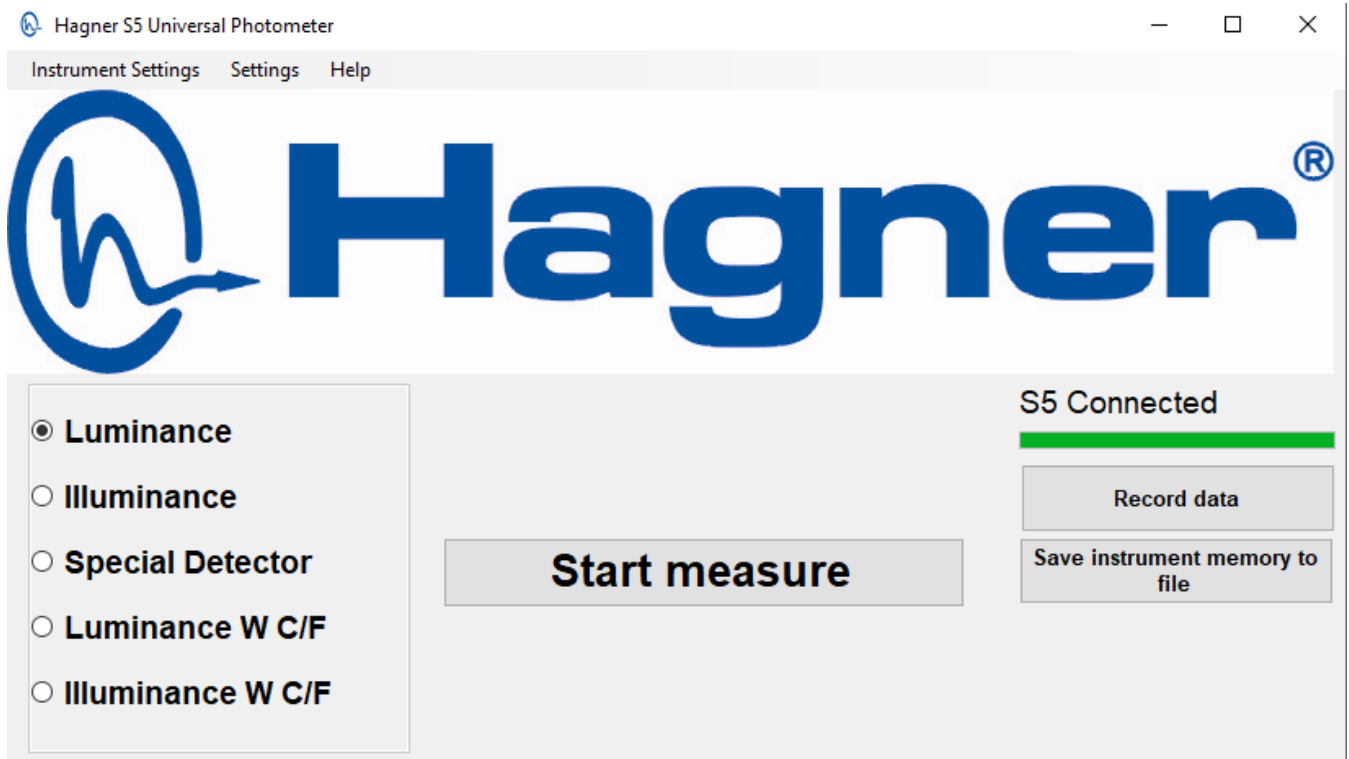
Standard detectors: Two silicon diodes filtered to close agreement with the spectral sensitivity of the human eye (CIE). illuminance detector is cosine corrected, sensitive surface $\varnothing = 10$ mm.

External connection: USB interface and software for instrument logging and extract saved values

Software requires Win 7 or later (Dotnet 4.0).

Power source: 3 volt standard battery, type LR6, alkaline. Lifetime approx 15 hours.

Battery eliminator 5 V USB.



Special detectors and other accessories

The Hagner Universal Photometer/Radiometer, model S5, can be seen as the principal part in a most versatile measuring system. By means of Hagner special external detectors and other accessories a number of different photometric quantities can be measured. By setting special detector response in S5 software direct reading of the value on the screen can be obtained.

Special detectors are available for measurement of

- illuminance with hemi-cylindric angular response
- illuminance with hemispheric angular response
- UV-A radiation
- UV-B radiation
- UV-C radiation
- IR radiation

Other detectors are

- extra sensitive illuminance detectors
- low sensitive illuminance detectors
- fibre optic detectors (0.5-50 metres or more, the latter length for use e.g. in areas with high voltage switch gears)

detectors with tailor made spectral and angular response

Some detectors can be delivered in water proof housings.

Other accessories available are

- Reflection references
- Special adaptors for measurement of light intensity, light distribution, control of image screens etc.
- pendulum
- close-up lenses
- extension cables

