Neo SERIES

Spectrometer

High-end performance, exceptional ease of use and robust from cover to core: meet Neo, a versatile platform to create spectral measurement solutions for a wide array of applications. Analytical, transmission or absorbance testing? No problem for Neo, which is also perfect for Solid State Lighting (SSL) like LED-testing, or for thin film coating and other demanding areas.

Highlights

High performance accuracy and precision: linearity, wavelength and dark current calibration

Very low-noise and stray light

Excellent linearity

User friendly

Direct control of accessories through the Neo

Calibration manager

Easy to integrate into systems (SDK)

Robust coupler, optional SMA, SMA-notched and FC/PC connectors

Modular bench options

Attractive price point

Low calibration maintenance cost

ADMESY

admesy.com/series/neo

The accurate, versatile and robust OEM solution

Admesy sets a strong focus on developing and manufacturing devices where accuracy, ease of use and speed are key factors. In order to achieve these aspects, Admesy considers the following aspects of spectroradiometers to be taken care of: wavelength calibration, dark current, linearity, absolute calibration of irradiance or radiance. All this is possible due to the high speed processor inside the Neo combined with algorithms developed for this specific device. In production processes, no external calculation power is needed from computers. Data can be used directly in production settings without any delay of processing data afterwards. This saves time and processing power of the operating system of a production line. When for example the integration time is set to 10 ms, the full calibrated spectral data is processed and transferred through USB 3.

The Neo is a modular spectroradiometer. The diversity is almost unlimited. Admesy can configure the Neo with almost any grating or slit. Please consult our distributor or sales engineers for your specific configuration. For OEM customers we additionally offer customized electrical, mechanical and firmware designs as well as system integration support.

Available accessories are cosine correctors, lens systems, spheres and cuvette holders, light sources and a neutral density filter wheel.

Specifications

Model	Neo Spectrometer
Spectral range	250 nm – 1100 nm*, custom wavelength configurations available upon request
Non-linearity	< 1 %
Data output resolution	Can be set by software to virtually any resolution
Focal length	115 mm
NA optical bench	0.10
FWHM	Depending on actual configuration, see the detailed specification
Order sorting filter	Linear variable filter
Wavelength accuracy	± 0.3 nm
Stray light	~ 0.05 % (measured @ 400 nm with 455 nm cut-off filter with broadband light source)
Detector	High end Hamamatsu cooled detector (S7031)
Dark noise (RMS)	~ 3 to 5 counts (16 bit ADC)
S/N*	> 1300
Mechanical shutter	Shutter lifetime > 1 000 000 operations
Integration time	4.8 ms – 60 minutes
Cooling temperature	–10 °C
Interfaces	High speed USB, RS232, Ethernet, Trigger connections
Measurement parameters	Spectral output, radiometric data or color data (Lumen, x, y, DWL, PWL, CRI, CCT, etc.)
Data processing time	15 ms
Size (LxWxH)	See mechanical dimensions
Weight	5.3 kg
Operating temperature	10 °C – 35 °C
Power input	Typical 15 V DC (14.5 – 15.5 V DC range)
Power consumption	Typical 12 W, Max. 30 W
Fiber connection	Industrial fiber connector

Note: *S/N is calculated at peak wavelength (almost full saturation) with 100 spectral measurements. Calculation method: average divided by standard deviation. Note: Spectral range depends on internal and (external) optical configuration. Neo types equipped with cosine corrector have typical best response between 250 nm – 1050 nm.

Download the brochures with detailed specifications from admesy.com/downloads

ADMESY

info@admesy.com