N I R

Polispec NIR is a robust and compact spectrophotometer that integrates reflection measurement optics (also configurable for transmission or contactless applications). Designed for both manual use and for in-process installation, it is made with special technological devices such as to make it highly performing in terms of sensitivity, operating dynamics and signal cleaning.

These qualities make Polispec NIR suitable for analysing very different matrices, from the most reflective to the most absorbent, without the need for different versions of the instrument for each application area.

Dim.   21.6 x 21.3 x 8.5 cm *(l x h x w)*

Weight   3.2 kg

Material   Anodised aluminium
(standard)

IP degree   IP68 *(standard)*
IP6X + IPX9K *(on request)*

Sensor   InGaAs sensor, 256 pixels,
cooled with single Peltier stage

Feedback cooling control system   Feedback,
stability T < 0.01 K

Spectrum range   900-1700 nm

Average numerical resolution   3.2 nm

Average optical resolution HWHM   3.25 nm

Optical signal collection   Direct optical coupling

Supply   12 Vdc power supply with power supply provided,
interchangeable rechargeable battery

Maximum absorbed power   20 W

Commands and signals

Hardware button dedicated to the acquisition of references.
Hardware button dedicated to the measurement acquisition.
Light and acoustic signalling of the acquisition status.

Type of measurements   Reflectance/transmittance *
* may require external accessories

Measurement geometry   Diffuse / 0°

Measurement references   Internal and automatic

Communication channels **   Standard WiFi + RS422 / RS485
** also available in WiFi + Ethernet configuration

Source type ***   Replaceable halogen lamp
*** internal back-up lamp option available

Software

poliDATA Data acquisition and chemometric prediction software compatible with the SensoLogic and UCal Chemometric suites.

poliPROCESS   Process analysis software compatible with the SensoLogic and UCal Chemometric suites, interface available for ISObus and PLC systems (modbus over TCP/IP or S7).

polispecNIR