trinamiX

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trinamiX Mobile NIR Spectroscopy Solutions

trinamiX PAL One

Spectroscopic specifications

Spectral range	1,450 nm – 2,450 nm
Spectral resolution	1 % of wavelength, e.g. 15 nm at 1,500 nm
Signal to noise ratio	> 5,000 per spectral resolution element

Optical components

Detector	256-pixel PbS line array detector
Lamp module	6 Tungsten halogen lamps Lifetime > 100,000 scans (typically) Replaceable by user
Sample interface	Scratch resistant sapphire window

Physical specifications

Dimensions	152 mm x 84 mm x 42mm
Weight	570 g
IP class	IP65 dust- and waterproof (splash and jet water)

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Release Date: 20230801
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Environmental conditions

Operating temperature	0 °C – 40 °C / 0 °C – 30 °C for charging
Storage temperature	– 20 °C – 60 °C
Air humidity (non-condensing)	20 % – 80 % (operation) / 20 % – 90 % (storage)
Height above sea level	≤ 2,000 m
Type of use	Indoor and outdoor (operation), indoor (charging)

Electrical specifications

Power input (for charging)	USB PD with 15 VDC, max. 2.75 A via USB type C connector
USB-connection (for stationary use)	USB 2.0 communication via USB Type C connector
Wireless connection (for handheld use)	Wireless low energy via integrated antenna

Battery

Type	Rechargeable lithium-ion battery
Number of scans per battery charge	> 6,000
Nominal voltage	11.1 V
Nominal capacity	2,600 mAh
Charging current	1,300 mA
Transport classification	UN class: 9 UN number: 3,400, Lithium-ion battery Energy of battery: < 100 Wh

Radio frequency module

The device contains the following radio frequency (RF) module:

Type	Würth Proteus-I AMB2621 / 2608011024000
Frequency range	2.44 GHz
Max. output power	Typ. -2 dBm, max. 0 dBm

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