

NIRLab

Identification and quantification of common drugs for law enforcement

Identify and Quantify Common Drugs

The drugs officers encounter every day aren't always what they appear to be. Purity varies, cutting agents change, and misidentification creates risk in the field and in court. NIRLab provides drug enforcement officers a fast, reliable way to identify and quantify substances on scene, without opening the packaging to reduce exposure risk. Results are easily accessible to anyone authorized for reporting and case processing.

Quantification of Substances

- Cocaine
- Heroin
- Ketamine
- Phenethylamines
 - MDMA
 - Amphetamine
 - Methamphetamine
- Cannabis
 - THC
 - CBD
 - CBN

Features:

- No sample preparation
- Scan substances directly or through plastic bags
- Point the device at the substance, press the button, receive results in under 5 seconds
- View results on the user-friendly mobile app
- Identify up to three substances in a mixture, including cutting agents and precursors



Specifications

Illumination Source:	Two integrated vacuum tungsten lamps
Lamp Life:	>40,000 hours
Sample Working Distance:	3 mm from window optimal, 0–15 mm
Dispersing Element:	VIAVI linear variable filter (LVF)
Detector:	128 pixel InGaAs photodiode array
Wavelength Range:	950–1650 nm (10,526–6060 cm)
Pixel-to-pixel Interval:	6.2 nm for 950–1650 nm
Spectral Bandwidth (FWHM):	<1.25% of center wavelength, 1% typical (e.g., @1000 nm, resolution is <12.5 nm)
Analog-to-digital Converter:	16 bit
Dynamic Range (Max):	1000:01:00
Measurement Time (Typical):	0.25–0.5 sec
Signal-to-noise Ratio (Typical):	25,000
Integration Time:	10 ms typical, minimum 10 s
Connectivity:	Bluetooth 4.1 (BLE) and USB 2.0
Weight:	<250 g (<9 oz)
Size (Length Diameter):	194 mm (6.64") x 47 mm (1.85")
Battery:	Rechargeable Li-ion, not removable
Battery Run Time/Charge:	>10 hours with lamps on continuously
Battery Cycle Life:	>75% capacity after 300 charge cycles
Battery Charge Time:	3.5 hours at 1A
Operating Temperature:	-20~ 40 °C (noncondensing)
Storage Temperature:	-20~ 50°C (noncondensing)
Dust and Water Resistance:	IP65 and IP67
Shock and Vibration:	MIL-PRF-28800F Class 2
Data Access:	App available for download on iOS and Android