



DATASHEET
EOC-SI-R3000DC
Portable Raman Spectrometer for Drugs, Explosives & Chemicals

Feature

- WIFI connect;
- GPS accurate positioning
- Linear CCD Sensor;
- Super Reliability;
- Intelligent & Visual Operation Software, Easy-To-Operate by specialist and non-specialist
- 11.6 Inch Capacitive Touch-screen
- Android 4.4 Operation System;
- Built-in Li-battery span life > 5hrs
- Lightweight: 8.5kg easy-to-take to field test
- IP-67

Application

- Police, Customs, Border
- Metro, Airport, Event Scene

Description:

EOC-SI-R3000DC portable Raman Analyzer has been newly launched to detect unknown drugs, explosives & chemicals ID in a fast & accurate way. Compact Raman is durable to detect accurate result in just a few seconds.

It is appropriate for various safety and crime scene personnel, including law enforcement personnel, hazardous materials technicians, crime scene investigators, and non-contact scan samples in the field.

Raman spectra indicates “finger print” of material, the unique spectra is perfect instrument to perform qualitative and quantitative analysis. Accurate, fast and non-destructive detection becomes a new trend.



SPECIFICATION:

EOC-SI-R3000DC	
Interface	USB 2.0 or WIFI
Operative System	Android 6.0
Screen	11.6-inch capacitive touch screen, multi-touch control;
Screen Resolution	1920X1080
Battery life span	>5 h
Integration Time	4ms - 120s
Power Voltage	DC 19V(+/-5%)
Operating Temp.	-10~40 °C
Operating Humidity	< 95%
Dimension(L*W*H)	40×30×18 cm ³
Weight	7.5 Kg
Reliability	
Spectral Stability	$\sigma/\mu < 0.5\%$ (COT 8 hours)
Temp. Stability	Spectral Shift $\leq 1 \text{ cm}^{-1}$ (10-40 °C)
Spectral Intensity shift (in 5 ~ 40 °C)	<±5%
Optical Prameters	
Spectral Range (cm ⁻¹)	200-2600
Resolution (cm ⁻¹)	10
SNR	>3000:1
Detector	
Type	High-sensitivity 512pixels InGaAs CCD
Cooled down to	-20 °C
Detect range	900-1700 nm
Effective pixels	512
Dynamic Range	50000: 1
Pixel size	25 ×500 μm
Exitation Laser	
Central Wavelength	1064 nm (+/-0.5nm)
Semi-peak width	0.1 nm
Max. Output	≥500 mW
Power Stability	$\sigma/\mu < \pm 0.2\%$

Raman Probe	
Operating Distance	6 mm
Blocking of filters	OD>8
Numerical aperture	0.3
Aperture	7mm