

Icon-X

Fourth generation 1064 nm handheld Raman



Your first line of defense against the unknown.

In high-stakes environments where every second matters, having the right intelligence can mean the difference between safety and disaster. Whether on the battlefield, responding to a hazardous materials incident, or securing national borders, military personnel, first responders, and border protection teams need instant, reliable chemical identification. The Rigaku Icon-X™ represents the latest in advanced threat analysis, as a fourth generation 1064 nm Raman tool with the latest features and analytical capabilities needed in safety and security applications. The Icon-X handheld Raman analyzer delivers actionable results in the field—quickly identifying chemical warfare, explosives, narcotics, and toxic industrial chemicals with the precision and durability demanded by those on the front lines. Built for rapid response and harsh conditions, our technology empowers operators to make informed, life-saving decisions in real time, ensuring mission success and personal safety in the face of chemical threats.



Key features:

Featuring a more ergonomic form factor, the Icon-X joins the award winning 1064 nm fleet of the Rigaku CQL platform, with improvements in all areas, including:

- Enhanced performance with faster scan processing
- Illuminated keypad and larger, more responsive touchscreen for use in harsh environments
- GPS to mark critical scan data for fleet management and sensitive site exploitation
- New accessories to expand applications, including short-range standoff capabilities in order to scan from a distance, as well as a ballprobe for easier sample access

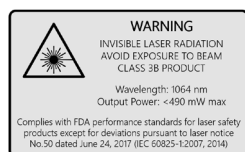


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Icon-X specifications	
Size	220 mm x 108 mm x 42 mm (8.7 in x 4.25 in x 1.65 in) without boot
Weight	1.7 kg (3.7 lbs)
Laser Wavelength/Max Power	1064 nm / < 490 mW
Spectral Resolution	~6-13 cm ⁻¹
Spectral Range	200-2450 cm ⁻¹
Spectrometer Type	Transmissive Volume Phase Grating
Detector	TE Cooled InGaAs - 512 pixel
Operating Temperature	-20°C to 50°C
Battery Type	7.2 V Li-ion, 3350mAh, >4 hrs operation (hot-swappable)
Adjustable Laser Power (Auto Mode)	10, 20, 30, 40, 50, 60, 70, 80, 90, 100%
Auto Collection Mode	•
Adjustable Laser Power (Manual Mode)	5-100%
Adjustable Exposure Time (Manual Mode)	200-7000 ms
Scan Modes	Identification, ThreatAlert™, ChemGuard™
Spectral Library Size	13,250+ items
Included Libraries	Biomolecule (including Amino Acids), Cutting Agent, CWA, CWA Precursor, Explosive, Explosives Precursor, General Chemical, General Precursor, Household Chemical, Industrial Chemical 1-4, Narcotic, Narcotic Precursor, Pesticide, Pharmaceutical, Polymer, Solvent, Steroid, TIC/TIM
Laser Features	Laser arm code, Laser arm / disarm keypad button, Scan delay, and Scan timeout
Environmental Ruggedness	IP-68 & MIL810H
Connectivity to Desktop or Mobile Device via WebUI	Waterproof USB-Type C / Wi-Fi / Peer-to-Peer
Display	Capacitive 5" touchscreen LCD
Input Method	Touchscreen or button operational via illuminated keypad
4C Precursor Monitoring	•
User Login Privileges	•
Ability to Add Materials to User Library	• (Up to 8 user library categories)
Create Custom Applications	•
On-board 13MP camera with LED flash	•
On-board Self Test	• (Polystyrene) / no user calibration required
Data Output Formats	.spc, .rrb, .pdf, .txt
CommandSuite Fleet Management	•
GPS	• (Optional)
Manufacturer Warranty	36 months
24/7/365 Reachback Support	Included under active support
Software and Library Updates	Included under active support
24/7/365 Reachback Support	Included under active support
Accessories	Included: Vial holder, Universal adapter Optional: Ballprobe, Standoff



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