



• **Q2 ION** Ultra-Compact Spark-OES Metals Analyzer

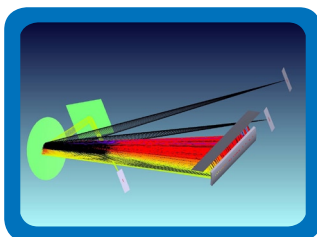
Bruker Elemental's all new spark spectrometer Q2 ION elevates metal analysis into new levels of simplicity and ease-of-use. Today Q2 ION is the smallest and lightest ultra-compact spark emission spectrometer for metals analysis available. It is a versatile multi-matrix system for comprehensive incoming material inspection and quality assurance of metal alloys. Its affordable price and low operational costs make it the ideal tool for smaller and medium-size businesses.

Q2 ION covers all major alloying elements in many applications such as Ferrous alloys, Aluminium, Coppers, and many more. It ideally addresses the requirements of small and mid-size foundries, metal processing industries, fabricators, quality control departments, warehouses, metal recyclers, and even inspection companies.



Q2 ION - Metals Analysis made easy

Its design makes Q2 ION ultra light (less than 44lbs/20 kg) so it can easily be hand-carried even to a nearby site for analysis. An optional case is also available. Despite its low weight, it is suitable for applications in which ruggedness is required. Q2 ION also defines new standards in ease-of-use. Place your sample onto the spark stand and press the start button. In less than thirty seconds you get the complete elemental composition of your metal.



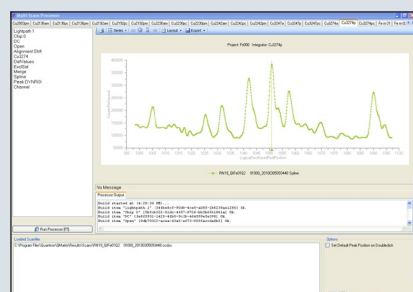
Q2 ION - Patented Optical System

The new patented Flat Field CCD optics is a masterpiece of optics design and mechanical engineering. Active Ambient Compensation (AAC) provides maximum stability in a temperature range between 10 and 45° C (50 and 113° F). The high-definition CCD detector together with well-proven ClearSpectrum® technology provide best-in-class analytical performance.

Innovation with Integrity

Elemental Analysis

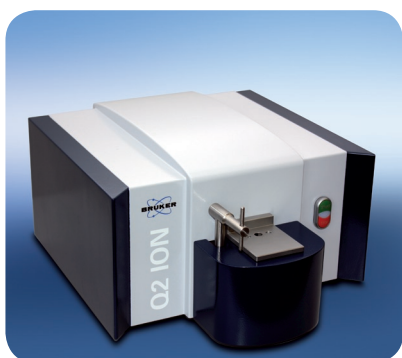
Detector with ClearSpectrumTechnology



Typical Analysis Screen

Element	Concentration	Element	Concentration
C	0.001	Fe	0.001
Si	0.001	Al	0.001
Mn	0.001	P	0.001
S	0.001	Cr	0.001
Co	0.001	Ni	0.001
Cu	0.001	Zn	0.001
As	0.001	Se	0.001
Br	0.001	K	0.001
Rb	0.001	Sr	0.001
Y	0.001	Zr	0.001
Nb	0.001	Mo	0.001
Ta	0.001	Hf	0.001
Th	0.001	Pa	0.001
U	0.001	Np	0.001
Pu	0.001	Am	0.001
Cm	0.001	Bk	0.001
Cf	0.001	Es	0.001
Fm	0.001	Md	0.001
No	0.001	Lr	0.001

Q2 ION



Technical Data Q2 ION

Patented Optical System

- Un-coated CCD detector with lowest dark current
- Flat field grating
- Full spectrum coverage: 170- 685 nm
- Resolution: 30 pm
- Argon purged for best transparency
- ClearSpectrum® technology for advanced spectra deconvolution
- Active Ambient Compensation (AAC) for operation between 10 and 45°C (50 and 113° F)

Analytical Solution Packages (ASP)

- Different matrix calibration packages available
- ASPs cover all major elements & alloy groups
- Upgradable for future expansion

Source Generator

- Maintenance-free, two phase PWM Generator
- Frequency 50 to 1000 Hz
- Spark & arc-like discharges from 10 µs to 2 ms

Sparkstand

- Maintenance-free
- Argon consumption 2.5 l/min. during measurement
- Argon quality 4.8 (or better)

Software

- Intuitive Windows® based software for simple routine operation
- Various user levels for secure and task-specific operations
- Functions for qualitative and quantitative analysis
- Complete QMatrix Software Suite including analysis database & interfaces to Office software
- Grade Library functions

Electrical Data

- 100 to 240 V (50/60 Hz)
- 200 W during measurement, 50 W standby
- 16 A (240 V) slow blow fuse or 25 A (100 V) slow blow fuse

Dimensions & Weight

- Width 440 mm / 17 inches
- Height 220 mm / 9 inches
- Depth 390 mm / 15 inches
- Weight ~ 19 kg / ~ 42 lbs

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