

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

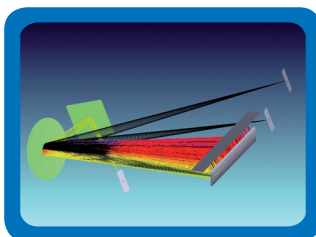
Bruker Elemental's all-new spark spectrometer Q2 ION elevates metals analysis to new levels of simplicity and ease-of-use. Today Q2 ION is the smallest and lightest ultra-compact spark emission spectrometer for metals analysis available. It is a versatile multi-matrix system for comprehensive incoming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

Q2 ION analyzes all major alloying elements in applications such as ferrous alloys, aluminium, copper, and many more. It perfectly fits the requirements of foundries, metal processing plants, 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 44 lbs/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 rugged environments. 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.



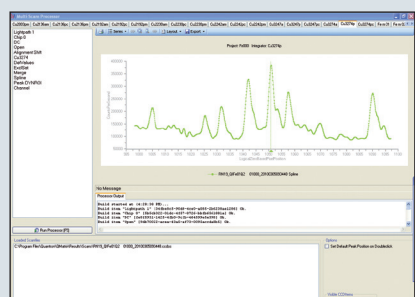
### **Q2 ION - Patented Optical System**

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.



# Technical Specifications

## Detector with ClearSpectrumTechnology



## Patented Optical System

- Un-coated CCD detector with lowest dark current
- Flat field grating
- Full spectrum coverage: 170 - 411 nm (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 (ASPs)

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

## Source Generator

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

## Typical Analysis Screen

Element	Concentration	...
Al	0.001	...
Si	0.001	...
...	...	...

## Sparkstand

- Nearly maintenance-free
- Argon consumption 2.5 l/min. during measurement
- Argon quality 4.8 specified for spectrometry 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
- Elemental Suite Software including analysis database and interfaces to Office software
- Grade Library functions

## Electrical Data

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

## Dimensions and Weight

- Width 440 mm (17 in.)
- Height 220 mm (9 in.)
- Depth 390 mm (15 in.)
- Weight ~ 19 kg (~ 42 lbs.)

## Environmental Conditions

- Temperature 0 - 45°C (50 -113° F)
- Humidity 10- 90 % no condensation

## O2 ION



## Options

- Wire adapter, tube adapter
- Sample preparation
- Carrying case
- Notebook, Desktop, or All-in-One Touch PC

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