

Optical Emission Spectrometer

Noble T7

NobleT7 – Full-Spectrum Optical Emission Spectrometer

NobleT7 is the most advanced and high-end model of its product family. With a wide wavelength range of 120–800 nm and a 120 nm reading capability, it delivers exceptional sensitivity at the ppm level — especially for non-metallic elements such as N, C, S, P, etc.

Advanced Technology & High Performance

Equipped with 12 high-resolution CMOS detectors developed by Hamamatsu (Japan)
Each CMOS can independently adjust the number of sparks
Vacuum-integrated optical chamber provides long-term spectral stability and precise results, even at very low detection limits
The optical heating system maintains a stable internal temperature of 38°C, ensuring consistent performance regardless of ambient conditions
No need for recalibration due to environmental temperature changes

Compact & User-Friendly Design

Desk-free design with all components housed in a compact body
Lockable wheels allow easy relocation
Integrated 27" touchscreen all-in-one PC for intuitive control and analysis
The Ulvac vacuum pump operates only 3 minutes daily under intelligent control — minimizing energy consumption and maintenance costs

Efficiency & Economy in One

Guarantees a minimum of 4,500 analyses per large argon cylinder (12 m³ / 40 L)
No argon gas consumption while idle
During analysis, argon flows first across the lens surface, cleaning dust and eliminating atmospheric gases — eliminating the need for lens cleaning even after years of use

Smart Software & Support

Analyze a wide range of elements simply by adding them via software
Real-time optical deviation correction ensures continuous accuracy
Automatic spectral line scanning and calibration identifies reference lines, corrects pixel deviations, and maintains optimal precision
Benefit from 24/7 remote support via our remote connection software — fast, free, and uninterrupted



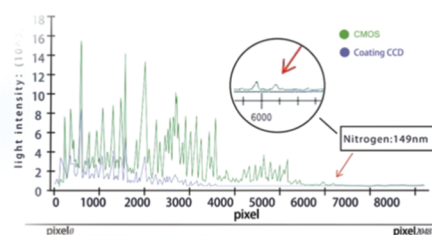
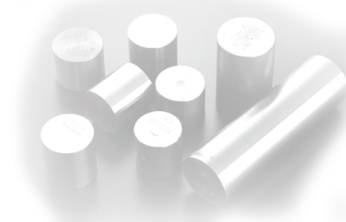
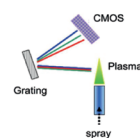
Application Areas

- ☑ Casting
- ☑ Metallurgy
- ☑ Aerospace & Defense
- ☑ Metal Quality Control
- ☑ New Material Research
- ☑ Scientific Research & Development



Technical Specifications

- ✓ Optical System: Paschen-Runge mounting
- ✓ Focal Length: 401 mm
- ✓ Wavelength Range: 120–800 nm
- ✓ Detector: Multiple high-resolution CMOS detectors
- ✓ Optical Chamber: Integrated vacuum design
- ✓ Excitation Source: Digital high-burn technology
- ✓ Power Supply: AC 220V / 50Hz
- ✓ Operating Conditions: 10–30°C / 20–80% RH
- ✓ Operating Temperature: -5°C to +42°C
- ✓ Storage Temperature: 0 to 45°C



Product Parameters

Argon Gas Requirements

Purity: $\leq 99.9999\%$
 Inlet Pressure: 0.5 MPa
 Flow Rate: 3.5 L/min

Dimensions & Weight

Dimensions: L610 × W740 × H1140 mm
 Weight: 160 kg