

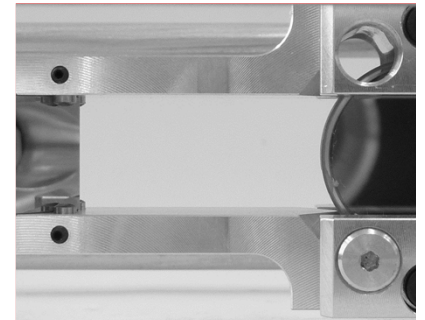
FT-NIR Rocket

AR©ptix
Switzerland

DATA SHEET



Near-Infrared Portable High Resolution Fourier Transform Spectrometer



The 3rd generation FT-NIR Rocket module combines high performance with compact design. Thanks to its new self compensated interferometer and its internal solid state reference laser, the system has excellent optical throughput, stability and wavelength reproducibility. The FT-NIR Rocket is a fibered NIR spectrometer that is compatible with light sources and sampling accessories typically used with grating-based instruments.

Typical characteristics of the Rocket FT-NIR are :

- **Compact (world smallest FT-NIR)**
- **Broad spectral range 11000–3800cm⁻¹ (0.9–2.6 μm)**
- **Excellent sensitivity**
- **High resolution of 4 cm⁻¹**
- **Cost-effective**

Typical applications of the FT-NIR series are :

- **Transmission/reflection measurements**
- **Chemometrics**
- **Material identification**
- **Laser characterization**

FEATURES & BENEFITS

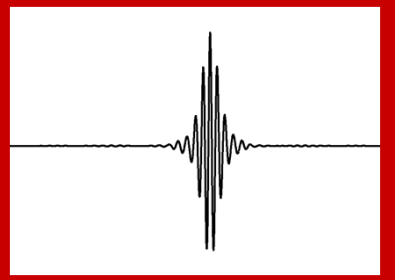
Extreme wavelength range, high resolution and optical throughput are combined in our compact Fourier-Transform spectrometers

High performance interferometer

The AR©spectro FT-NIR uses a compact yet high-performance, optically self-compensated interferometer.

Solid-state control laser

The use of a solid state reference laser allows our FT-NIR to be cost-effective, while maintaining excellent stability and wavelength reproducibility.



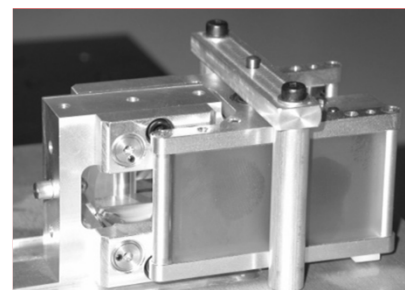
FT-NIR Rocket

ARCOptix
Switzerland

DATA SHEET

General specifications

Spectral Range	11000–3800cm ⁻¹ (0.9–2.6 μm)
Resolution	4 cm ⁻¹ (wavenumber)
1000 nm	< 0.8 nm
1700 nm	< 2 nm
2600 nm	< 5 nm
Wave-number accuracy	<1cm ⁻¹ @ 4000cm ⁻¹ (25± 5 °C)
Dynamic range Ratio between peak signal with 20W QTH light source and dark noise Single measurement	>3000:1
A/D converter	24 bit
Fiber optical connector	SMA 905 connector, fiber core diameter
Optical fiber entrance	up to 1mm, NA=0.3
Detector	Extended type InGaAs photodiode
Effective measurement time	1 Scan/s (averaging mode)
Control laser	Solid-state 850nm
Operating voltage	5 V (fully USB powered)
Operating temperature	10° - 30°C
Communication interface	UBS 2.0
Software interface	Windows XP /Windows 7
Product dimensions	180mm x 160mm x 80mm
Weight	850 g



OPTIONS

Temperature-stabilized control laser

for ultimate wave-number accuracy down to <0.1cm⁻¹

Cooled InGaAs detectors

For applications requiring ultimate sensitivity and temperature stability

High-resolution option

Interferometer settings can be modified to reach 4cm⁻¹ if required for your application.

Advanced software

Software modules are available for:

- Library search
- Chemometrics