

## DATASHEET

# VIS-NIR and UV-VIS-NIR fibered spectrometers



Our VIS-NIR and UV-VIS-NIR are ultra-broadband spectrometers designed for use with fibered probes over the complete UV, VIS & NIR spectral range, 350-2600nm or 200nm-2600nm. Those systems incorporate one Arcoptix FT-NIR Fourier-Transform scanning spectrometer for the NIR range 900-2600nm, and one multichannel grating spectrometer either for the VIS range (350-1000nm) or for the UV-VIS range (200-1025nm). The software supplied with the spectrometer automatically merges the spectra produced

### ■ Benefits

- Ultra-broad spectral ranges: 350-2600nm or 200-2600nm
- Very good resolution (<5 nm)
- Operation via optical fibers
- Fast measurements (down to 2 seconds)
- Very easy to use

### ■ Applications

- Transmission, diffuse reflectance
- Light source measurement (NIR Lasers, LED, Solar, ...)
- Material identification and quantification in various fields such as geology, food and beverage industry, medical diagnostics

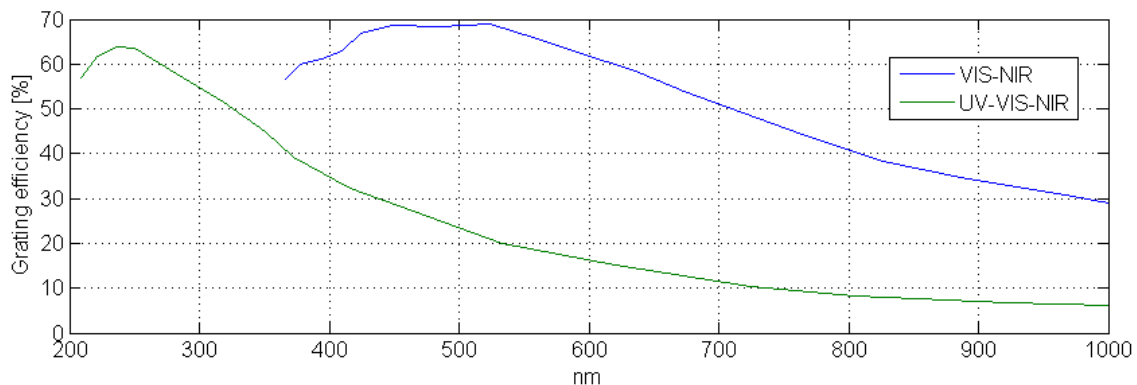
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### Specifications

| Type                             | VIS-NIR-FIB   | UV-VIS-NIR-FIB  |
|----------------------------------|---|---|
| <b>Combined spectral range</b>   | 350-2600nm  | 200-2600nm  |
| <b>VIS / UV-VIS spectrometer</b> | Array detector grating spectrometer<br><b>Spectral range: 350-1000nm</b><br>Best efficiency (>30%): 350-850nm<br>(see graph below)  | Array detector grating spectrometer<br><b>Spectral range: 200-1025nm</b><br>Best efficiency(>30%): 200-450nm<br>(see graph below) |
| <b>NIR spectrometer</b>          | Fourier-Transform NIR spectrometer<br>with extended-range InGaAs photodiode, 24-bit ADC, resolution 8cm <sup>-1</sup><br>Spectral range: 900-2600nm<br>Option: 2TE-cooled NIR detector (range 900-2500nm) |   |
| <b>Resolution</b>                | <5nm  |   |
| <b>Fiber inputs</b>              | 2x SMA-905 (one for VIS/UV-VIS, one for NIR)  |   |
| <b>Min. measurement time</b>     | 2 sec   |   |
| <b>Software Interface</b>        | Windows 7 / 8 / 10  |   |
| <b>Operating voltage (power)</b> | 12V DC<br>(line power adaptor is included)  |   |
| <b>Communication Interface</b>   | USB 2.0   |   |
| <b>Product Dimensions</b>        | 220mm x 180mm x 80mm  |   |
| <b>Product Weight</b>            | 2.5 Kg  |   |
| <b>Operating Temperature</b>     | 5°C – 35°C  |   |

#### Efficiencies of VIS and UV-VIS spectrometer gratings

The VIS-NIR (350-2600nm) and the UV-VIS-NIR (200-2500nm) not only differ by their spectral ranges, but also by the efficiency of their grating in the VIS or UV-VIS spectral range. The VIS-NIR offers a better efficiency the range 350-1000nm, while the UV-VIS is rather optimized for the UV and has lower performance in the VIS range.



SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT NOTICE.