

# Spectrometers

## USB spectrometer



- Broadband scanning USB spectrometer
- Ideal for broad spectral bandwidth
- Compact and robust



## Overview

The spectra of our broadband **Venteon** oscillators are difficult to measure with standard Si-based CCD-spectrometers. Limited by the detector sensitivity these devices are only suitable to cover a spectral range up to 1050nm, which is not enough for the broadband spectra of state-of-the-art femtosecond lasers such as **venteon ultra**, which covers a spectral range up to 1200nm. So far only expensive and scanning optical spectrum analyser have been suitable for a reliable oscillator characterisation.

The TQ systems irSys USB spectrometer is a compact, mobile USB spectrometer that covers a wavelength range spanning from 610nm up to 1700nm, more than enough to characterise our broadest oscillators. This device is a scanning-type spectrometer and features a MEMS mirror array for scanning the spectral components onto a Si- as well as an InGaAs-detector.

## USB Spectrometer TQ systems irSys Type I

### Specifications

Wavelength range: 610-1700nm    SNR (single shot): 7000:1  
Si- & InGaAs detectors    Temperature dependency: 0.01nm/K  
Spectral resolution: <5nm

### Technical data

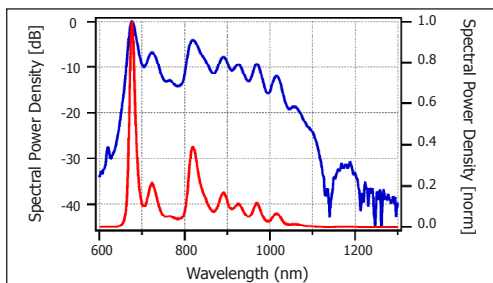
Fibre plug: SMA 905    Dimensions: 104 x 75 x 85mm<sup>3</sup>  
Interface: USB/RS485    Weight: ~750g (~1.65lbs)  
Compatible with Windows 7,  
XP & Vista

### Included in delivery

USB spectrometer irSys Type 1  
Power supply  
USB cable & drivers  
Spectrometer software & documentation



Very compact and robust scanning USB spectrometer irSys Type I, its dimensions measuring only 104 x 75 x 85mm<sup>3</sup>.



Broadband spectrum recorded with irSys USB spectrometer shown on a logarithmic scale (blue) and linear scale (red). The wavelength range can be expanded up to 1700nm.

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