# Product Information [ tecSpec Pro ]



## tecSpec Pro: UV-VIS-NIR Integrated Spectrometer



High performance spectrometer system with Ethernet interface and integrated data preprocessing. Equipped with a wide-range Spectral Sensor, the unit is ideal for use in laboratories or Ethernet networks. An F-SMA fiber connector as optical input allows easy connection of fiber-based probes or measurement assemblies.

#### **Features**

- UV-VIS-NIR wide wavelength range
- I High spectral resolution
- I Very low straylight design
- Ethernet interface with TCP/IP based protocol
- On-board real-time data preprocessing
- Dual-stage spectral data buffer
- Various synchronous and asynchronous modes of operation
- Precise external trigger capabilities
- I Flash trigger output
- Includes MultiSpec Pro II Basic Software

#### **Applications**

- Laboratory research
- Distributed spectral data acquisition in networks
- I Thin film measurements
- Fluorescence
- I End point detection
- Reaction monitoring

#### [Spectrometer Unit tecSpec Pro]

The integrated spectrometer module tecSpecPro contains a high-resolution wide-range spectral sensor engine with superior stray light suppression and electronics designed by tec5 for the specific requirements of diode array spectroscopy, featuring an Ethernet interface and built-in data preprocessing. The unit is ideal for precise and reliable acquisition of spectra, connecting directly to a controller / evaluation computer by an Ethernet connection or for measurements in a network. It contains real-time data preprocessing capabilities, thus reducing the network data traffic and host processor load by on-board averaging, dark correction or linearization.

The unit contains a low latency external trigger input, a flash trigger output and programmable digital inputs and outputs for accurate measurement synchronization. The built-in firmware additionally supports many synchronous and asynchronous modes of operation. For the host PC, the application programs AdminTool and MultiSpec Pro II basic are included. In addition, software development kits are offered for efficient customer programming of special software.

# Product Information [ tecSpec Pro ]

### [ Technical Data ]

### tecSpec Pro [190 - 1000 nm]

Wavelength Range	UV-VIS-NIR: 190 – 1000 nm
Pixel Count	2068 (Total)
Data Acquisition	16 bit, 1000 kpixel / Second
Minimum Integration Time	0.2 ms
Optical Input	F-SMA Fiber Connector
Output Interface	Ethernet (100baseT)
Protocol	TCP/IP Based (Proprietary)
Dimensions	120 x 115 x 175 [mm]
Weight	1.4 kg Approx.
Supply	100 / 240 V 50 / 60 Hz AC (External Supply) or 4.5 – 36 V Wide-Range DC
Operating Temperature	+5°C - +35°C

