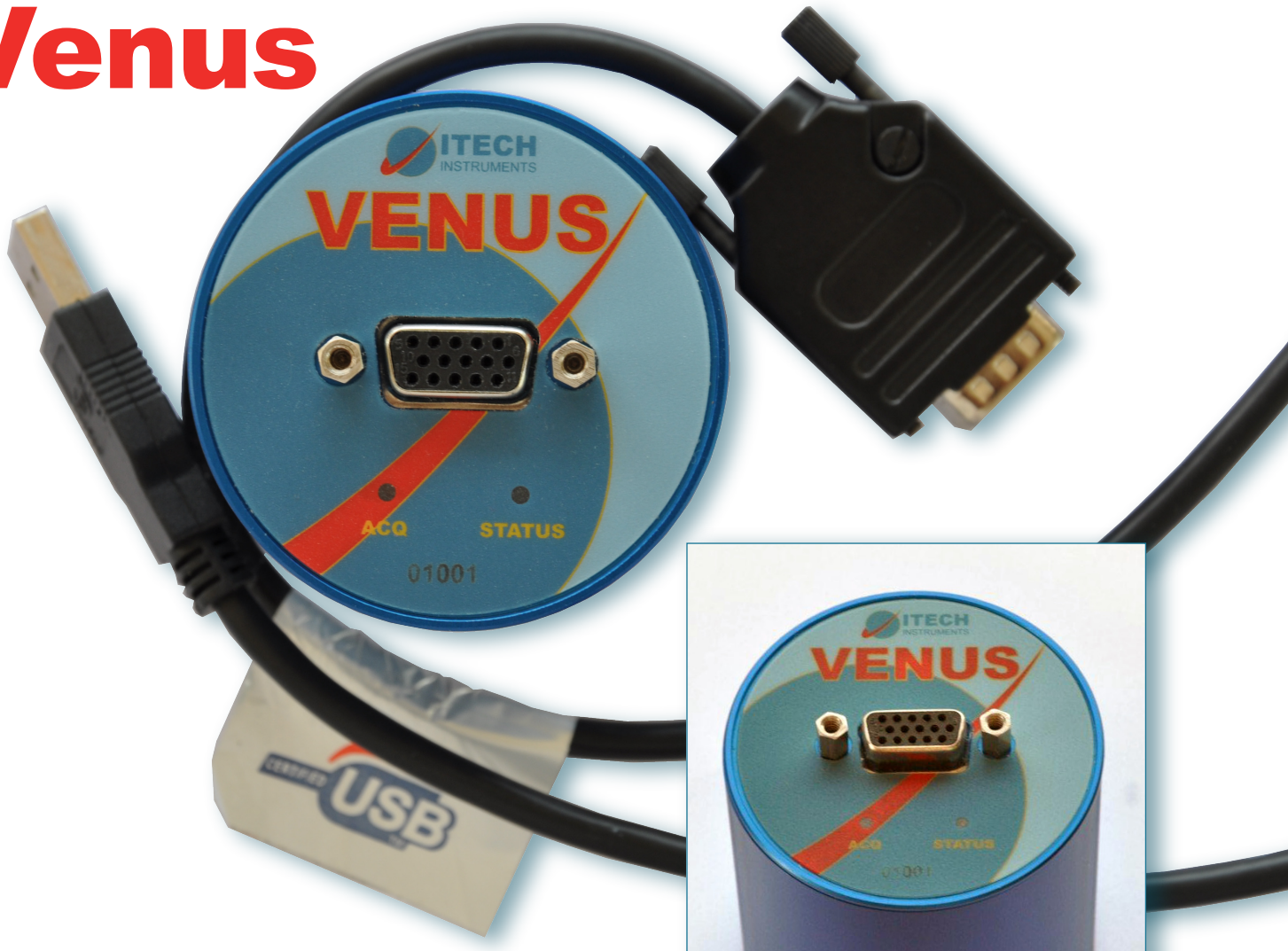
ITECH INSTRUMENTS

Venus



The **Venus** is a universal digital multichannel analyzer integrated into a photomultiplier base. The **Venus** can be used in the most exacting spectroscopic applications as well as high rate, industrial counting applications. Because of our range of user selectable gain and time constant options, the **Venus** is easily adapted to all of today's choices of scintillator, including NaI, CsI and LaBr.

The **Venus** connects to your PC via USB. The USB bus supplies all communication and power requirements for the Venus.

Along with pulse height analysis, the **Venus** includes a time stamped list mode. In this mode, each event is stored with the time of it's detection in clock units (15,625 ns). Up to 64 **Venus** devices can be synchronized for coincidence counting.

The **Venus** works with the InterWinner nuclear spectroscopy software.

With modern low cost digital electronics, **InterWinner** software and single cable USB communication and power, the **Venus** is the ideal device for research and industrial laboratories, university teaching and radiation safety applications, hospital and other nuclear medicine applications and, of course single or multi-system homeland security functions.

ITECH INSTRUMENTS

Physical:

- Robust aluminum housing
- Size: 58 mm x 59 mm (diameter x length, without connector)
- Net weight: 168 g

Power supply:

- Using USB, < 500 mA depending on the HV current needed by the detector

Sampling ADC:

- 12 bits
- 20-65 MHz sampling frequency, user selectable

Spectrum size:

- 256-4096 channels, user selectable
- 32 bits per channel

Acquisition modes:

- PHA mode
- Time stamped list mode
- Pulseshape list mode
- Multispectrum scaling mode

Gain:

- Analog coarse gain
- Digital fine gain
- Digital stabilizer

Detector connection:

- Standard JEDEC B14A connector

Digital I/O connector:

- DB15 HD type connector
- USB 2.0 high speed (480 MBits/s)
- 6 programmable digital inputs/outputs (0V/3.3V) for sample changer control, synchronization, gate input, trigger input, single channel analyzer output and other applications

Maximum count rate:

- PHA mode: > 1 million counts/s, depending on detector speed
- List mode: > 200000 counts/s

High voltage:

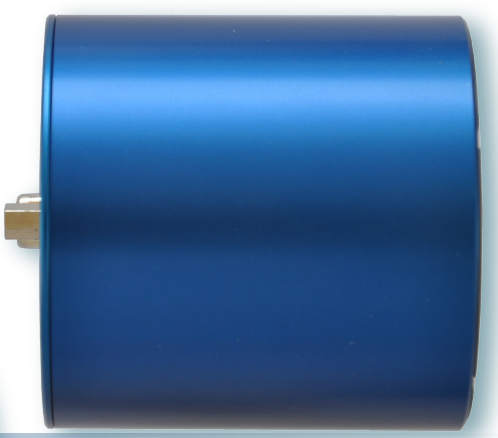
- 0 - 2000 VDC (positive)

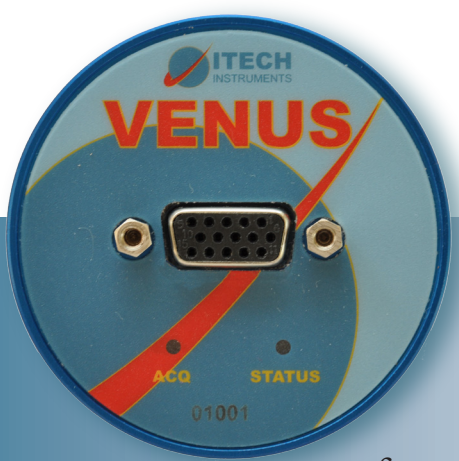
Environment:

- Temperature: 0-50 °C
- Humidity: <80%, non condensing

Options:

- InterWinner quantitative analysis software
- Ethernet interface instead of the USB interface, Power over Ethernet
- Negative HV instead of positive HV
- Connector compatible with R6231 photomultiplier





ITECH INSTRUMENTS

☎ +33 (0)4.42.07.41.92 • 🖷 +33 (0)4.88.71.42.00

ZI La Valampe • 3 Avenue de la Maranne

13220 Châteauneuf-Les-Martigues

info @ itech-instruments.com • **www.itech-instruments.com**