ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

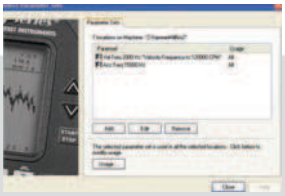
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

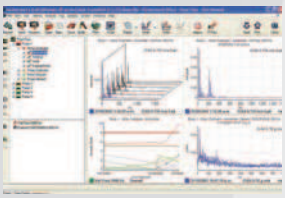
Find the *GE / Commtest vb1000V* at our website: *Click HERE*

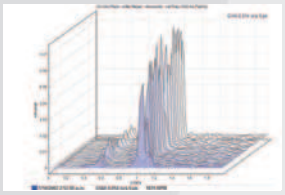
vb1000v™



ECONOMICAL, EASY-TO-OPERATE ADVANCED VIBRATION DATA COLLECTOR, ANALYZER AND SOFTWARE







supplied with **Ascent** software

The **vb1000v** is a single-channel route-enabled product that provides everything you need for route-based data collection and analysis, including the powerful **Ascent®** software, all included in the purchase price.

Ascent Level 1 enables you to program the **vb** instrument with up to 780 separate machine definitions covering up to 240 different route choices. A library of over 200 customizable parameter sets is also available enabling a vast array of measurement options.

- **Ascent** Level 1 Software
- Route enabled – build routes in Ascent and send to the **vb** instrument
- CBDb – Commtest Bearing Database with over 30,000 bearings
- Single-channel operation
- One accelerometer – included in the purchase price
- Laser speed sensor – for automatic capture of machine running speed
- 8 MB memory – store up to 8000 spectra in the **vb** instrument
- 95 dB Dynamic Range
- 20 kHz Fmax
- 3200 Line FFT capability
- "Commtest Care" including 5 year warranty on the **vb** instrument

On-site printing requires the purchase of an optional thermal printer. Please see your local Commtest reseller for details.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

SPECIFICATIONS	MODEL **vb**1000v	REMARKS
Accelerometer Input		
Number of channels	1	
Type	2-wire, low impedance piezoelectric	Commonly termed 'ICP® type'
Sensitivity	100 mV/g nominal	Calibration adjustable (8.5 to 2300) mV/g
Connector	BNC	Safety feature: break-free inline connector
Input impedance	500 kΩ	
Voltage swing	18 V peak-to-peak	AC coupled input, allows for ± 8 V sensor output swing (± 80 g)
Sensor excitation current	0 mA or 2.2 mA (configurable)	2.2 mA required for ICP® type accelerometer
Sensor excitation voltage	24 V maximum	at sensor terminals with sensor attached
Tachometer Input		
Sensor	Laser sensor with reflective tape included in kit	Sensor triggers when the tape reflects its beam
Laser sensor range	10 cm to 2 m nominal	Dependent on size of reflective tape
Sensor supply	7.2 nominal (6.0 to 9.5) V instrument battery	Available to power sensor. Protected by 0.1 A PTC
Input type	Optically isolated, accepts TTL pulse	
Pulse rating	2.5 V (4 mA) min, 10 V (27 mA) max, off-state < 0.8 V	Triggers on positive edge
Speed range	(30 to 65 000) RPM (0.5 Hz to 1.08 kHz)	
Parameter Indication		
Displays	Acceleration, velocity, displacement, demodulation	User selectable
Maximum levels	± 80 g (800 m/s^2), ± 4 in/sec (100 mm/s) ± 400 mil (10 mm)	Zero-to-peak. Approximate, dependent on individual calibration
Dynamic signal range	95 dB or greater (typical at 400 line resolution)	Acceleration and velocity. Greater with higher resolution and averaging
Harmonic distortion	Less than -70 dB typical	Dependent on input level and type. Other distortions and noise are lower
Display ranges	60 dB or 120 dB visible range with manual shift	
Units	g or m/s^2, in/s or mm/s, mil or mm or µm	Zero-to-peak, peak-to-peak or rms
	AdB, VdB	AdB ref. 1 µg rms, VdB ref. configurable (1.0e-5 or 1.0e-6 mm/s rms)
Graph types	Spectrum (freq domain), waveform (time domain)	Solid histogram for spectrum, line graph for waveform
Magnitude display	Overall rms value, cursor-position value	Digital readout on graph
Cursors	Standard cursor	Vary x position to display x and y values
	Dual cursors	Lock standard cursor as reference and display difference
	Harmonic cursor	Up to 32 whole-number multiples of standard-cursor frequency
Accuracy	± 1% (0.1 dB)	Measured at 100 Hz, 23 ± 5 °C, 400 lines, 400 Hz range
Frequency response	± 0.2 dB from 10 Hz to 5 kHz;	From value measured at 100 Hz
	± 0.5 dB from 3 Hz to 20 kHz	
Spectrum Display		
Fmax possible ranges	0 to (100, 125, 200, 300, 400, 500, 600, 800) Hz	Or equivalent CPM values
	0 to (1, 1.2, 1.6, 2, 2.5, 3, 4, 5, 6, 8, 10, 15, 20) kHz	Or orders-based from 1X to 30 000X
Fmin possible range	0 to Fmax	**vb** zeroes all spectral lines below Fmin
Resolution	400, 800, 1600, 3200 lines (configurable)	1600 lines maximum if tachometer or more than 50% overlap used. 800 lines maximum for dual channel measurements. Can zoom in to display individual spectral lines
Frequency scale	Hz, CPM	
y axis	Acceleration, velocity or displacement	
Window shapes	Hanning, rectangular	
Overlap	0, 12.5, 25, 37.5, 50, 62.5, 75, 87.5%	
Number of averages	1, 2, 4, 8, 16, 32, 64, 128	Dependent on frequency range
Averaging types	Linear, exponential, peak hold, synchronous	Increases sampling time proportionally
Demod bandwidths	20 bandwidth options	From (125 to 1250) Hz up to (16 to 20) kHz
Tachometer Display		
Displays	RPM, Hz, 1X amplitude and phase angle	For selected amplitude type, phase angle in degrees
Range	30 RPM (0.5 Hz) to 65 000 RPM (1.08 kHz)	
Time Intervals		
	LINES	
	Range 400 800 1600 3200	
Sampling time in seconds	(0 to 100) Hz 4 8 16 32	Dependent on number of lines and number of averages (values shown in table for no
(example ranges)	(0 to 800) Hz 0.5 1 2 4	overlap, no averaging, maximum display update rate of 4 per second)
	(0 to 4) kHz 0.1 0.2 0.4 0.8	
	(0 to 20) kHz 0.02 0.04 0.08 0.16	
Typical measure and record	5 s for 1600 lines, 1600 Hz, 8 averages, 50% overlap	Not including initial startup and settling time
Trigger Modes	Single (key press), free run	Trigger status displayed (busy, done, run, stop)
Logging Features		
Output formats	**vb** screen, transfer to **Ascent** PC-based software	
Data storage	8.5 MB non-volatile	Total of 8000 spectra at 400-line resolution or 1000 spectra at 3200-line resolution
Data storage format	Up to 30 folders	User-specified machine, point, and axis names (16 characters) entered from PC or
	Up to 200 named machines per folder	keypad. Each recording has a unique time/date stamp
	Up to 780 named machines for all folders	
	Up to 30 multi-axial points per machine	
	Up to 8 routes per folder	
Display	Graphic LCD	
Resolution	240 x 128 pixels	
Viewing area	4.3" x 2.3" (110 x 60) mm	
Backlight	Electro-luminescent	
PROFLASH	Allows **vb** firmware to be upgraded via built-in serial port	Download firmware service packs via the Internet
Communications	RS232	15 kV ESD protected. Cable with DB9 connector.
Baud rate	57 600 bits per second	
Battery		
Type	Custom Nickel-Cadmium pack	
Voltage	7.2 V nominal	
Capacity	1500 mAh nominal	
Operating time (typical)	9 hours with backlight off, 6 hours with backlight on	Depends on mode and setup
Charger and Conditioner	Integral charger – automatic and manual control	Power transformer with (13.5 ± 1.5) V DC, 1 A output included in kit.
Charge rate	0.7 A nominal	2.5 hours for complete charge nominal
Discharge rate	0.5 A nominal	Combats NiCad battery memory effect
Mechanical		
Size	9.7" W x 6.1" L x 3.0" H (247 x 154 x 75) mm	Including protective boot
Weight	4.4 lb (2 kg)	Including protective boot and strap
Environmental		
Temperature/Humidity		
Operating	(32 to 122) °F (0 to 50) °C	
	80% RH (32 to 86) °F	Non-condensing
	70% RH (86 to 122) °F	Non-condensing
Storage	(14 to 140) °F (-10 to 60) °C	
	95% RH	
EMC	EN50081-1	Radiated and conducted emissions
	EN50082-1	RF field, ESD and fast transient immunity

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP