

Introducing
**vb and
SCOUT100
Series**



Based on a design with a proven track record of quality and innovation, the vb and SCOUT series data collectors, analyzers and balancers have been engineered from the ground up to offer leading-edge reliability, accuracy and usability.

The vb and SCOUT platforms bring industry-leading Bently Nevada condition monitoring expertise to the world of portable data collection and analysis, giving you access to a dependable, efficient, and cost-effective condition monitoring solution that is deployable across your entire plant.



Easy and efficient up to four-channel capability

The SCOUT100-EX and SCOUT140-EX analyzers offer the power and convenience of dual- or four-channel measurement and dual-plane balancing. The balancing function enables quick diagnosis and correction of dynamic unbalance, the most common form of unbalance. vb and SCOUT's combination of accuracy, intuitive operation, ease of use and outstanding storage capacity enables our analyzers to deliver a premium return on investment.

The vb and SCOUT series are compatible with powerful software solutions—System 1™ Evolution and Ascent™.

System 1 Evolution:

- Multiple communication methods between the data collector and software: USB cable, Ethernet cable, File mode (e.g. via email), Remote Comms (e.g. over WAN).
- Run up to three different CM databases simultaneously on a server from remote clients
- Route enabled—build routes for efficient data collection and send to the instrument
- Bearing Database with over 30,000 bearings
- Orbit and waterfall plots
- Comprehensive Diagnostic Reports to explain your analysis and recommendations, or use Plot Records to track internally
- Statistical alarm creation and adjustment
- User Machine Templates to streamline the creation and updating of multiple similar machines. Includes points, bearings, measurements, alarm bands, setpoints etc.
- Quick Config to help with those difficult decisions when setting up a new database - what measurements to take, what alarm bands to check, what initial setpoints to apply

Ascent Level 2 software:

- vbX and SCOUT100 series instruments are still fully compatible with this trusted legacy analysis software

Enhanced instrument functionality

- Great ergonomics for walk-around data collection
- True left- and right-handed operation
- 5.5" HVGA backlit LCD, crystal clear in all conditions
- Up to 4 simultaneous channel recordings
- 10 hour battery life
- Lightweight, rugged IP65 rated case
- DC coupled sensor support
- Wide measurement range: 1000 g, 25,000 mm/s, 2500 mm
- 2-plane balancing
- ≥ 95 dB dynamic range
- Up to 12,800 lines FFT resolution
- Up to 80 kHz Fmax
- 1 GB memory—virtually unlimited spectra and waveform storage
- USB host port for data transfer to external USB memory
- Optional balancing kit includes Laser Tach, mag mount, extension cables, etc.
- Keyphasor™ tach mode
- 5-year warranty on the instrument hardware
- vb models are CSA Div 2 certified, SCOUT models are ATEX Zone 2 certified



Features and capabilities

Features	vb7 or SCOUT100	vb8 or SCOUT140
Instrument Inputs		
Analog Channels (Simultaneous)	2	4
Tachometer Input	✓	✓
DC Coupled Inputs	✓	✓
Triax Enabled		✓
Sensors: Vel, Displ, Keyphasor Tach	✓	✓
Sensors: DC Voltage Output	✓	✓
Sensors: 4–20 mA Output		✓
Processing		
Fmax	40 kHz	80 kHz
Spectral Lines	6400	12,800
Recording Types		
Spectrum/Waveform	✓	✓
Route Enabled	✓	✓
Process Parameter Keypad Entry	✓	✓
Demodulation	✓	✓
6Pack	✓	✓
Bump Test	✓	✓
Coast–Down/Run–Up	✓	✓
Orbit Plot	✓	✓
Order Tracking	✓	✓
Time Synchronous Averaging	✓	✓
X–Channel Phase (Single Frequency)	✓	✓
Long Time Waveform	✓	✓
Modal Impact Test		✓
Cross Channel ODS		✓

Specifications

For full specifications, see these datasheets:

- vb5 111M6572
- vb6 111M7155
- vb7 116M5255
- vb8 116M5343
- vb Balancers 132M3167–1
- SCOUT100Ex 323223
- SCOUT140Ex 323330

Features	SCOUT100 Kit	SCOUT140 Kit
Balancing Functionality		
Balancing Enabled	✓	✓
Number of Planes/Sensors	2 / 2	2 / 4
Accessories Included		
Instrument Carry Bag	✓	✓
Battery Pack	✓	✓
AC Power Adapter	✓	✓
DC Car Adapter	✓	✓
USB Data Transfer Cable	✓	✓
Shoulder Carry Strap	✓	✓
SensorKeeper	✓	✓
Accelerometers	2	4
Accelerometer Magnetic Base	2	4
Coiled Cables	2	4
Triple BNC Adapter		1
1m BNC–to–BNC Cables	2	2
Balancing Kit (optional)		
Keyphasor/Laser Tachometer cable	1	1
Laser Tachometer	✓	✓
Reflective Tape	✓	✓
Balancing Kit Carry Bag	✓	✓
Tachometer Magnetic Stand	✓	✓
5 Meter Straight Cable	2	2

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