



SVT C series wireless vibration & temperature sensors have the smallest footprints in the industry. They use external power supply (9v 36v DC), so that users never need to worry about replacing the battery. The sensors communicate with Broadsens gateways wirelessly. SVT C series wireless vibration & temperature sensors have two categories: SVT CA and SVT CV, which match the functions of SVT A series sensors and SVT V series sensors respectively.

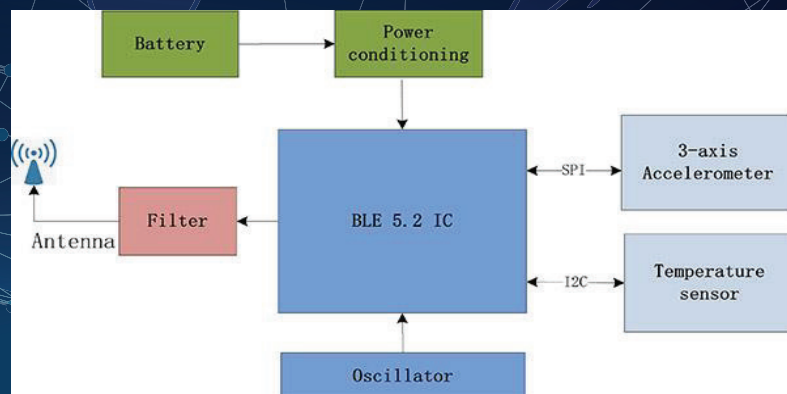


SVT200-C wireless vibration & temperature sensor

Parameters	Description
Acceleration range	SVT200-C: up to 8g; SVT300-C: up to 16g; SVT400-C: up to 64g
Sampling rate	SVTx00-CA: 50Hz to 25.6kHz adjustable; SVTx00-CV: 6.4kHz in high-speed mode; 3.13Hz in low-speed mode
Resolution	16 bit; $\pm 8g: 0.24mg/bit$; $\pm 16g: 0.48mg/bit$; $\pm 64g: 1.95mg/bit$
Nonlinearity	< 0.6%
Noises	SVT200-C/SVT300-C: 130ug/ $\sqrt{}$ density; SVT400-C: 330 ug/ $\sqrt{}$
Temperature sensor range	-40 - 85 0C (-40 - 185 Fahrenheit)
Temperature accuracy	-25-850C: ± 0.3 0C; -40 - -250C: ± 0.4 0C; no calibration needed
Measurement & transmit mode	Continuous low speed sampling, periodic high speed sampling & transmission, and triggered high speed sampling & transmission
Power consumption	<10uA idle; < 1mA with data transmission and DAQ
Power supply	9-36V DC supply via 8 feet power supply coaxial cable
Wireless protocol	2.4GHz ultra-low power proprietary
FCC ID/IC ID	X8WBC833M / 4100A-BC833M
Transmission distance	Up to 300m (900 ft) line of sight, open space
Size	30x18x13 mm (1.18x0.71x0.51 inch)
Weight	56g (1.98 oz) including coaxial power cable
Mounting method	Epoxy or custom bracket
Environment	Working temperature: -40 - 85 0C; storage temperature: -55 - 85 0C; IP67 waterproof

Sensor block diagram

Revision date: November 28, 2023



SVT C Series Sensors Details

SVT CA sensors include: SVT200 CA, SVT300 CA and SVT400 CA; SVT CV sensors include SVT200 CV, SVT300 CV and SVT400 CV. The specifications of SVT C sensor are the same as the standard SVT A or SVT V series sensors. For example, the specs of SVT200 CA are the same as SVT200 A, except power supply, size and weight.

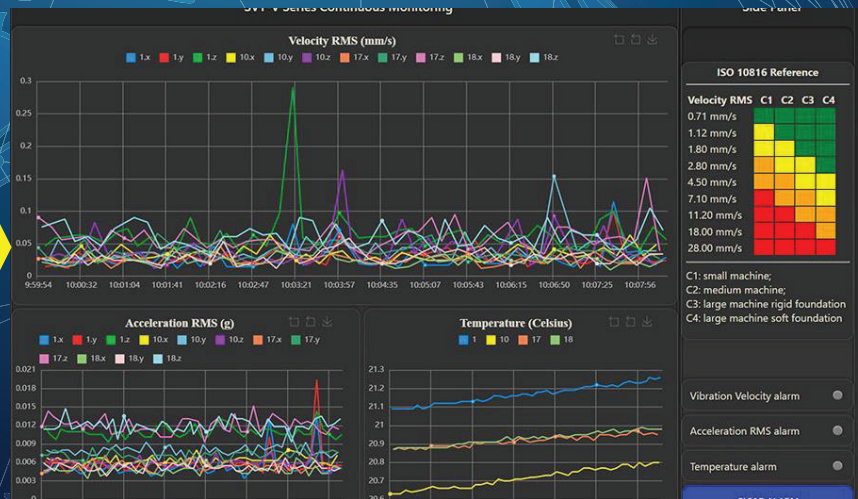
Instead of using battery, the SVT C series sensors use 9V 36V power supply, which is ideal for applications that have power supply such as spindle machines.

SVT CA sensors acquire raw triaxial acceleration data and temperature data by commands, manually or automatically. They are ideal for advanced vibration analysis, machine condition monitoring and predictive maintenance.

SVT CV series wireless vibration & temperature sensors continuously monitor vibration & temperature in real time 24/7. The sensors can detect accidents and send out alarm within 0.1 second typically, which is crucial for important assets.

Monitoring Software

Software at wireless gateway is based on open-source software node-RED. No software installation is required. It can be accessed with all major web browsers.



Software advantages

- . True real-time vibration monitoring
- . Intuitive data visualization
- . Alarm & threshold setup
- . Scheduled data acquisition
- . Time-series database
- . Vibration trend charts
- . FFT analysis
- . OTA firmware upgrade
- . Easy expansion
- . Secure data transmission