## **Sonic Tension Meter**

Sates

- Consistent, accurate tension readings every time
- Compact and light
- Easy to use
- LCD screen with back light
- Output readings measurable in hertz, pounds or newtons
- Improved frequency range from 10 5000 hertz
- 20 memory registers for belt constants
- Gates product number 7420-0508

Unlike the force deflection method which involves applying force to the belt, the Gates Sonic Tension Meter measures belt tension by analyzing the harmonic characteristics of a vibrating belt. Belts, like strings, vibrate at a particular natural frequency based on mass and span length.

The Sonic Tension Meter can easily be operated by one person for fast, accurate readings on all types of synchronous belt drive systems and V-belt drives. Simply enter belt mass constant, belt width and span length\* into the meter using the built-in keypad. Next, hold the meter sensor just above the belt and lightly strum belt to make it vibrate. Press "measure" button to obtain the reading as a frequency (as hertz) or as a force (pounds or newtons).

Use the standard cord sensor to reach inside cramped compartments where conventional measurements would be impossible. An optional flexible sensor can be bent and repositioned for convenient, one-hand operation. Use the optional inductive sensor to measure belt tensions in high-noise or windy environments.

\*The ideal tension values, along with the belt mass constant, belt width and span length, can be found by entering drive parameters into Design Flex® Pro™ or Design Flex Web™at www.gates.com/drivedesign.









