# Vibrating wire Read out


Vibration wire readout is designed for use with all of vibration wire sensors in all kinds of weather conditions

## Operating principle

The vibrating wire readout operates by initially generating a voltage pulse containing a spectrum of frequencies that span the natural frequency range of the wire in the gage being read. when the signal reaches the coil assembly mounted inside the gage, adjacent to the wire, it change the magnetic field around the wire at a frequency corresponding to that of the input signal.

When one of the frequencies in the input signal coincides with that of the wire, the wire vibrates and continues to vibrate after the input signal has ceased.

## Specification

| | |
|---|---|
| Excitation Range | 400HZ ~ 6.000HZ |
| Resoultion | 0.1microstrain |
| Timebase Accuracy | 0.01% |
| Temperature Type | themistor |
| Temperature Range | -20℃ ~ 80℃ |
| Temperature Resoultion | 0.1℃ |
| Dimension | 217×160×218 |

| MODE | Calculation | Units | Frequency sweep(hz) |
|---|---|---|---|
| A | Period in seconds | μseconds | 450 – 6,000 |
| B | $F^2 \times 10^3$ | digits | 1,200 – 3,500 |
| C | $F^2 \times 10^3 \times 4.062$ | strain | 450 – 1,000 |
| D | $F^2 \times 10^3 \times 3.304$ | strain | 450 – 1,000 |
| E | $F^2 \times 10^3 \times 0.39102$ | strain | 1,000 – 3,500 |
| F | $F^2 \times 10^3$ | digits | 2,500 – 6,000 |

사이스텍 S.I.S.Tech.Co., TEL: 051) 518-9750, FAX: 051) 528-9751 / kth4183@naver.com