## VM Series Vibration Wire Sensor Reading Module

#### New Feature SF3.50 (Compared with SF3.33)

### Frequency measurement performance improved

- Weak Signal Enhancement, Further enhance the weak signal recognition and processing algorithm.
- Auxiliary Frequency Capture. Under the premise of not changing the usage habit, we use preset noise, characteristic Frequency model and Smart Frequency Capture (SFC) algorithm to get high and reliable Frequency. High precision frequency data can still be obtained from signals that cannot be correctly identified in the past.
- Frequency doubling automatic correction, automatic recognition frequency doubling, confirmation, correction.
- ➤ Low Frequency Performance Optimization. The reading performance of the frequency sensor below 500Hz is further enhanced.

### More Reasonable Signal Amplitude Evaluation Method

➤ Digital integration algorithm. The problem of amplitude time domain offset caused by hardware integration of previous versions is solved. The real-time and accuracy of signal amplitude are stronger, and it has more practical physical significance.

### ■ Temperature Measurement Performance Improved

- > Extended NTC temperature range. The lower limit of low temperature and the resolution of temperature measurement were significantly improved.
- ➤ Two-Line 1Wire Communication, on the basis of compatibility with the original functions, the new LDC (Long Cable Digital Communication) technology is added to make the two-Line 1Wire Communication distance up to 500~1000 meters.

## ■ "Digital" vibrating wire sensor support

- Automatic Identification of sensor: With the help of highly reliable LDC technology, sensor manufacturers can build an 18B20 temperature sensor into the sensor for temperature measurement and unique ID acquisition (automatic identification of sensor identity).
- Direct access to physical values: Manufacturers can embed 3mm programmable electronic tag (MT01) into the sensor, in temperature measurement at the same time to obtain preset sensor manufacturer, model, category, cable length, factory frequency, calculation parameters and other information, the dynamic frequency value is calculated as a physical quantity.

# ■ User Interface is Further Simplified

Increase Frequency Measurement Method, The newly added comprehensive frequency measurement method (SFC-H/L), automatically complete parameter modification, faster and more reliable frequency measurement.