# VW data recorder



#### Description

Model ACE-1000 **VW data recorder** of our company is designed with law current of charge circuit of 6 VDC so that it can measure VW sensor that is generating frequency.

VW data recorder, it can be operated with just 6 of membrane keys so that a beginner can use easily.

To improve conspicuousness, it adapted  $256 \times 128$  large graphic LCD that information related with measurement is displayed. So, it is easy to use at job-site at night as backlight loaded in it.

It shows Hz for VW sensor's basic unit and selected sweep band on large graphic LCD screen. Also it marks lower unit of Hz, current time, remained battery, selected temperature sensor between the thermistor and RTD temperature sensor.

ACE-1000, it can be saving 4,000 of measured values about 64 data sets, and the data can be transmitting by computer and RS-232 communication. So it is very useful in a large jobsite and the software applied in Windows has alignment function that optional alignment of sensor by the IDs, dates and times is possible. As well, capability and quality are superior to any existing loggers.

It has select function of engineering unit and select function of sweep band as well that it can be connected with any VW sensor from all the companies.

Of the 6 keys, select key is to select frequency band and to select display unit.

It automatically raptures the power by 10 minutes (up to 60 minutes) to prolong battery's life span more efficiently. And it is loaded with up-to-date of Ni-MH rechargeable battery that you can measure for 30 hours continuously. Another main function is that it can control contrast that you can get an accurate measurement in both hot and cold regions.

We used ABS case of impulse endurance that you can use it in any unfavorable condition because it is dealt with moisture and waterproof.

## Features

- Waterproof, moisture proof, impulse endures and portable type
- High resolution and high accuracy of reliance
- Possible to use at a low temperature
- Possible to measure at night by backlight function
- Function for adjusting resolution
- Automatic power shutoff function
- Charge checking function (LED for indicating charge)

### **Functions**

- On-Off function
- Auto power break function
- Unit shift function It is function with which you can select indicated unit and you can choose one of Hz (frequency),  $\mu$ sec (period), 10<sup>3</sup> Hz<sup>2</sup>(high sensitive frequency), 4 of  $\mu\epsilon$ (microstrain), Thermistor°C, RTD°C.
- Band shift function It is a function that selects width of band of frequency, here are 4 widths of band; 0.45 $\sim$ 1.2, 0.8 $\sim$ 2.0, 1.4 $\sim$ 3.5, 2,4 $\sim$ 6.0kHz
- Battery recharging function
- Measured data transmission function
   The measured data can be transmitting by computer and RS-232 communication.
- Data saving function
   You can save the measured data in the memory.
- Data deletion function
   You can transmit the saved data in computer and then delete the saved data.
- Battery indicating function
   LCD indicates the battery capacity.
- Menu select function
   You can select item about system information and measurement in establishment spot.
- Contrast of LCD control function

# Specification <sub>I</sub>

Model	ACE-1000
Applied sensor	Vibrating wire sensor
Frequency range	450~6,000Hz
Displayed units	Hz, 10 <sup>3</sup> Hz <sup>2</sup> , $\mu$ sec, °C, $\mu$ ε0.3911, $\mu$ ε0.7756, $\mu$ ε3.304, $\mu$ ε4.062,
Resolution	0.01% FSR(0.1Hz)
Accuracy	0.02% FSR(0.1Hz)
Operating temperature	-20~50℃
Communication port	RS-232 port
Temperature sensor	Thermistor( $3k\Omega$ ), RTD( $2k\Omega$ )
Temperature resolution	0.1℃
Display	256×128 graphic LCD
Keyboard	Membrane key & 6 function keys pad
Data capacity	4,000 data points distributed in maximum of 64 data sets.
Power	4.8VDC/rechargeable Ni-MH battery
Battery life	30 hours
Dimensions	$234 \times 197 \times 114$ mm
Weight	1.5kg
Material of case	ABS plastic case
Accessories	<ol> <li>Jumper cable</li> <li>Rechargeable adaptor</li> <li>RS-232 cable</li> </ol>

