



Vibrating Wire Reading Station Model RP-MP-51.

FEATURES:

- Small size
- Read all type of VW sensors
- Low cost
- Low power consumption

SPECIFICATIONS:

INPUT

SUITABLE FOR INPUT FROM ALL MAKE TWO WIRES VIBRATING WIRE TRANSDUCER WITH 110 TO 150 OHMS (NOMINAL) SENSOR COIL. INPUT FROM EQUIVALENT SENSORS OF OTHER MANUFACTURE IS ALSO ACCEPTABLE.

Excitation

Swept frequency excitation, 5 V (type) peak-to-peak square wave.

Frequency Measurement:

Range.500 Hz- 5kHz

Measurement time: 128 cycles.

Measured parameter: Time period

Resolution: 0.1 micro-seconds(in time period display mode)

Accuracy: Period measurement $\pm(0.02\%$ of reading.+ 0.1 msec.)

Displayed parameter:

Time period, frequency, frequency squared and engineering units.

australia new zealand indonesia malaysia hong kong taiwan philippines chile

Temperature Measurement
Measurement range: -20 to 50 °C
Resolution: 1 °C

DISPLAY

LCD dot matrix alphanumeric display 16 characters x 1 line
Potentiometer is provided for contrast enhancement.
Red LED provided for battery low indication.

KEYBOARD

16 key environmentally sealed membrane keypad. Keys are multiple functions. Primary key function and numerical value are marked on keys.
Engineering units display
Standard unit are us (micro strain) ksc (kg/cm².) kg, T, mm, m, °C (Celsius) and deg.(degrees).

CPU

Intel 80C32 8 bit micro controller.

Memory

32 KB EPROM program memory and 8 KB Non Volatile RAM (NVRAM) data memory.
Data memory provides non-volatile storage of 100-transducer calibration constant and 720 sets of time stamped data reading. Each data set consists of one parameter reading and corresponding temperature reading (for VW sensors with integral thermistor sensors only) together with date and time data was stored.

REAL TIME CLOCK

A real time clock is provided for time and date stamping of stored data. RTC is battery backed and will continue keeping time even if the indicator is kept off for short periods of time. However if the indicator is turned off.

RTC time keeping accuracy: 2-minute/ month, typical, over the operating temperature range with indicator powered on. Very sparingly used indicator will show much more variation.

RS-232C SERIAL PORT

RS-232C serial output is provided to connect the indicator to a serial printer or IBM compatible PC equipped with a RS232C serial interface port.

Baud rate: 2400 baud fixed.

Format: 1 start bit, 8 data bits, no parity and one stop bit .

Data file uploaded to computer is in comma delimited ASCII text file format acceptable to most commercially available spreadsheet, database and analytical software.

DIAGNOSTICS

Power On Self Test plus additional diagnostic utilities are provided.

POWER SUPPLY

Internal rechargeable 6 V 4Ah sealed maintenance free Lead Acid battery. An external 110/220 V AC input 7V DC output battery charger is supplied with the instrument.

Input/Output Connectors

Circular splash proof 7-pin connector for sensor input and RS-232C serial interface port (combined) and 3- pin connector for battery charger.

Environment

Operating temperature range :0 to 45 C

Operating humidity range: 10% to 90% (no condensation)