

## UNIVERSAL PROCESS INDICATOR / CONTROLLER



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Universal Process Indicator/Controller UN2000 is a giant step in measurement technology. UN2000 can measure Temp, PH, ORP, Flow, Conductivity, Level, Weight, %, Speed and any other parameter from 2-WIRE Transmitter. It finds application where different types of transmitters with wide ranges are to be displayed. The INSTRUMENTATION DEPT. is at ease to monitor various process variables with reduced inventories and high accuracies. The confusions at the site during installations are avoided.

Versatile

Programmable

RS232/RS485

4-20mA Re-transmission /Control

### Specifications

Input	From 2-wire transmitter (4 to 20 mA), 24 VDC available		
Range	User selectable measuring ranges Programmable from - 1999 to + 1999, with decimal point		
	freely configurable from most to least significant digit		
Accuracy	± least count (i.e. 1 or 0.1)		
Setting	Easy setting of measurement ranges and High/Low limits by Feather - touch, elegant, long life and user friendly membrane key pads		
	No trimpots to be touched		
Display	Bright seven segment, 4 digits for parameter and 4 digits for status		
Limits	High and Low Limits		
Controls	On - Off, Time Proportional, PI control action		
Dead Band	Programmable		
Logic	Heater or Alarm Programmable		
Output	2 Relays corresponding to each limit rated 230 V/6 Amp.		
Re-transmission O/P	User programmable 0-20mA / 4-20 mA. On request		
Computer Interface	RS232 or RS485 available		
Password	Lock facility to avoid tampering		
Design	Modular, Sturdy and Wireless design		
Noise Immunity	EMI/RFI interference is suppressed by MOV's and R-L-C filters		
Supply	90 - 260 VAC, 50 Hz		
Ambient Conditions	Temp. 55°C and Relative humidity 99%		
Box	Height - 96mm; Width - 96mm; Depth-150mm; DIN size		
Notes	1. Control o/p with PI control action and 4-20 mA Control o/p on request		
	2. "Soaking time" function on request		
	3. S.S.R. o/p available		

Transmitter

Inst Onamn

Micro Controller

**Setting Keys** 

Display / Relays / Retransmittion / RS232 / RS485





Note: Contact factory for Control o/p

#### LINEARISED TEMPERATURE INDICATORS

Nippon1010M is linearised temperature Indicator. Thermocouples like Pt/Rh (R, S), B are used for wide and high temperature ranges. EPROM linearisation helps to trace the temperature curve accurately. The Indicating accuracy  $\pm 1\,^{\circ}\text{C}$  is achieved for the entire TEMPERATURE range. Refer Table - 1 for the range/accuracy. Instrument is widely used in Glass mfg., metal Treatment, furnace and laboratories... etc...

Туре	Range	Accuracy	
Pt / Pt Rh 13%	"R"	0 - 1700 °C	± 1 °C
Pt / Pt Rh 10%	"S"	0 - 1700 °C	± 1 °C
Pt-6% Rh/Pt-30% Rh	"B"	100 - 1820 °C	± 1 °C
Copper/Co-Nickel	"T"	0 - 200.0 °C	± 0.1 °C
Nickel-Chromium/Copper-Nickel	"E"	0 - 800 °C	± 1 °C

Table 1



# VOLUME / LEVEL INDICATORS and CONTROLLERS

Universal Process Indicator / controller is widely used for measuring level & in turn volume. Arithmetic capabilities of "microcontroller" is used. Level is measured with help of level transmitters, the Cross Sectional area of the storage TANK is to be programmed in the instrument. Instrument will calculate VOLUME of the liquid present inside the tank. The formula used is VOLUME = HEIGHT x AREA.

The above instrument along with NIPPOLOG can provide excellent INVENTORY MANAGEMENT for LIQUID STORAGE TANKS.

Level Control can be achieved using control functions of the instrument.



## WEIGHT INDICATORS and CONTROLLERS

Load 2000 is used for accurate weight measurement and controls. Load 2000 provides precise excitation voltage to the load cell.

The load cell o/p is measured & displayed. Instrument is provided with 2-Relay o/p s.

S.S.R. o/p is provided for faster CLUTCH/BRAKE operations.

Load 2000 is widely used in Dozing, Packaging, Textiles, Winding ...etc...where accurate WEIGHT measurement is must.



### DUAL CHANNEL BARGRAPH INDICATORS

BAR2000 series a hightech range is giant step in measurement technology. BAR2000 has 2 channel BARGRAPH displays. The instrument finds application in measurement of LEVEL, FLOW, VOLUME, WEIGHT, TEMPERATURE, HUMIDITY, % SPEED and any other process parameters. The continuous comparison of two process parameters is now easy for INSTRUMENTATION DEPARTMENT.

NOTE: Our manufacturing units are well equipped with necessary testing facilities like Calibrators traceable to N.P.L., Delhi and tested at E.R.T.L. / I.D.E.M.I., Computerised Simulators and So on.



### Nippon Technologies

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