

# red ipn

## **Panel Meters Intelligent Series Meters Pax Series Meters**

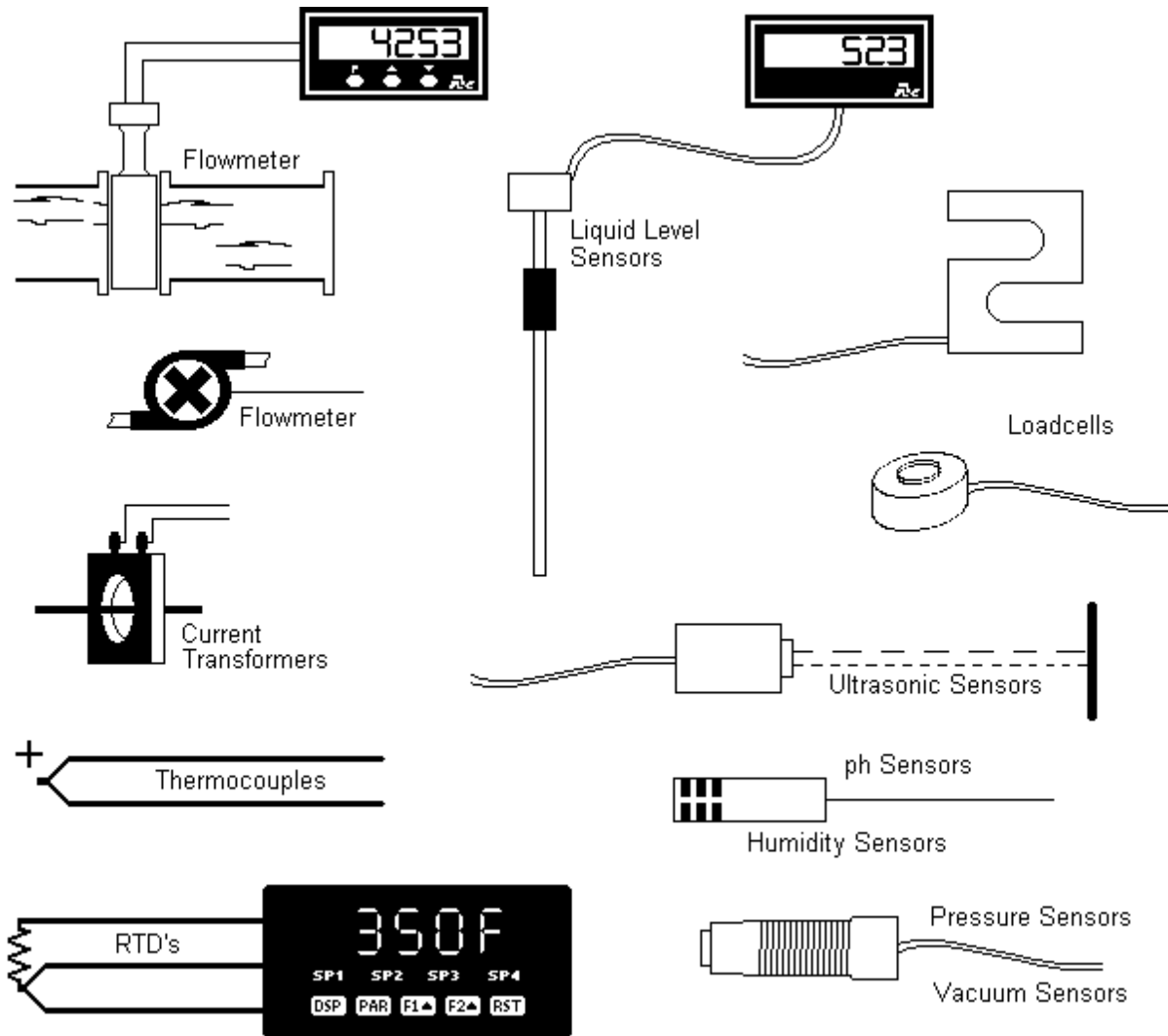


# THE BASICS OF PANEL METERS

**Panel Meter**- a panel mounted display; in the industrial market, more specifically a panel mounted meter which accepts an analog signal.

**Analog Signal**- A signal that can vary continuously without interruption. The receiving device measures the level or “strength of the signal. I.e. 4-20 mA signals, 0-10 vdc signals.

Examples of Analog Signal sources.



# **PAX's SERIES**



- **Versatile Input Capability**

- **PAXD-Universal DC Input**

- DC Voltage (+/-200mVDC, +/-2VDC, +/-20VDC, +/-300VDC)
    - DC Current (+/-200uA, +/-2mA, +/-20mA, +/-200mA, +/-2Amp)
    - Resistance (0-100 ohm, 0-1000 ohm, 0-10,000 ohm)

- **PAXH-True RMS AC Voltage/Current Input**

- AC Voltage (200mV, 2V, 20V, 300V)
    - AC Current (200uA, 2mA, 20mA, 200mA, 5A)

- **PAXP-Process Input**

- Process Inputs only (0-20mA or 0-10VDC)

- **PAXS-Strain Gage/Load Cell Input**

- Differential input designed for Load Cell bridges (+/-24mV or +/-240mV)
    - Jumper selectable excitation (5V or 10V)

- **PAXT-Temperature Input**

- Thermocouples (T, E, J, K, R, S, B, N, C, or Custom Scaling)
    - RTD's (100 ohm Pt (platinum) 385/392, 120 ohm Nickel 672, or 10 ohm Copper 427)

- **Field Upgradable Outputs**

- Alarms (2 or 4 relay, 4 PNP, or 4 NPN)
  - Serial (RS-232, RS-485, or DeviceNet)
  - Re-transmitted Analog (4-20 mA and 0-10 VDC)

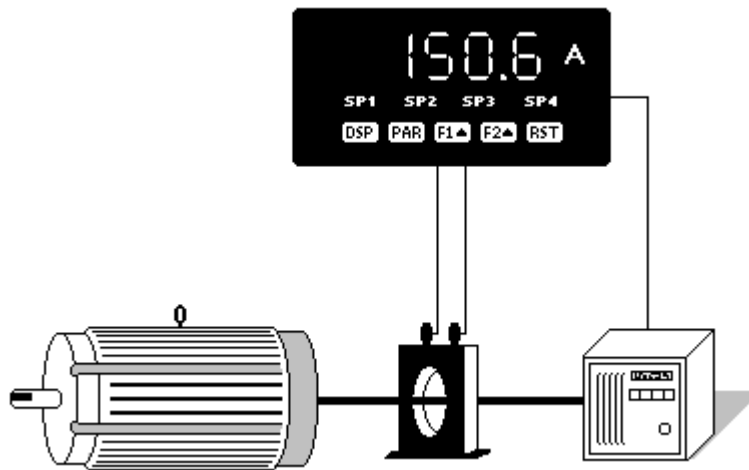
- **5 Digit Input Display**

- **9 Digit Totalizer**

- **DC Sensor Excitation**

PAX... continued

- **NEMA 4X/IP65 Front Panel**
- **Rugged Rubber Buttons**
- **3 Front Panel User Programmable Inputs**
- **3 User Programmable Inputs Selectable for Sink/Source**
- **Minimum and Maximum Input Storage**
- **PAXLBK10 Allows Customer to Label Meter With Engineering Unit**
- **85-250 VAC or 24 VAC/11-36 VDC Powered**
- **Standard .5" High Digit Display or Large 1.5" High Digit Display Available**



## **Intelligent Meters Series**



- **Ten Different Input Models:**

**IMP**- DC Current Meter (4-20mA or 10-50mA DC)

**IMD1**-DC Volt Meter (+/-2VDC, +/-20VDC, +/-200VDC, +/-300VDC)

**IMD2**-DC Current Meter (+/-200mVDC, +/-200uA, +/-2mA, +/-20mA, +/-200mA, +/-2Amp)

**IMS**-Strain Gage Meter (+/-20mV, +/-200mV)

**IMH**-5 Amp AC Meter (0-5Amp AC, also offered...CT020050 and CT005050 Current Transformers)

**IMT**-Thermocouple Meter (J,K,T,R,S,B,N,E Type Thermocouples)

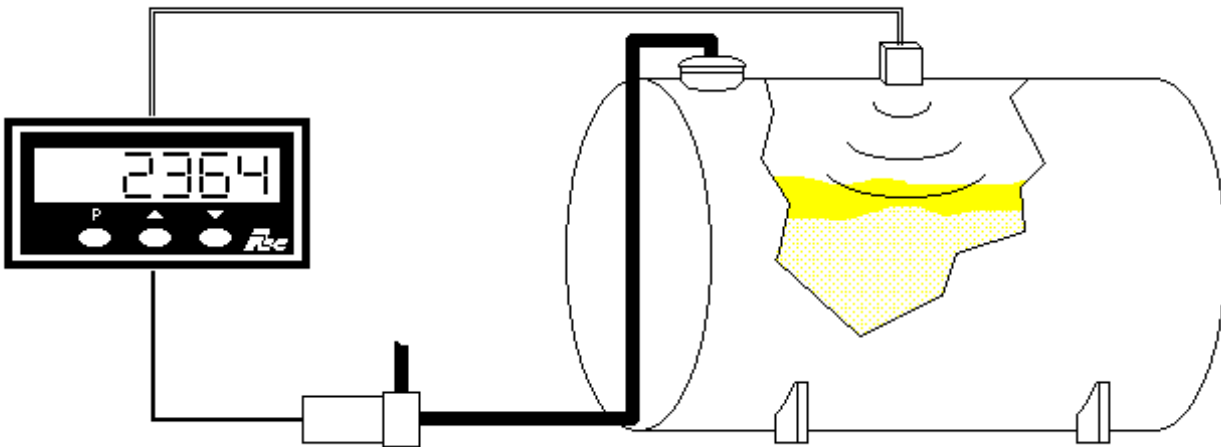
**IMR**-R.T.D. Meter (100 ohm Platinum RTD , 385 or 392 coefficient)

**IMY**-Thermistor Meter ("400 Series" 2252 ohm or "700 Series" Thermoliner Thermistors)

**IMA**-Serial Slave Display (Current Loop standard; RS-232, 422, or 485 with GCM converters)

- **One Pass Scaling (Key-in Method or Apply Actual Signal)**
- **Built in Excitation**
- **Integrator/Totalizer capability**
- **Dual Alarms (5-Amp "Form C" isolated contacts)**

- **4-20 mA or 0-10 V Analog Retrtransmitted Output of Input or Totalizer**
- **Serial Communications**
- **NEMA 4 Front Panel**
- **Standard 1/8 DIN Bezel**
- **Programmable Operator Lockouts**



# Standard Panel Meters (non-programmable)

**Scaling or Span**-A feature that allows a panel meter readout to be adjusted to display engineering units instead of the level of the signal (i.e. 500 Gallons/minute instead of 20mA).

**Offset or Shift**-A feature that allows a panel meters “zero point” to be shifted. This permits the display to read zero at minimum inputs such as 4mA or 1V.

**Zero Based**-A meter that does not have Offset. The only way a zero-based meter will read 0 on it’s display is when the input is a zero potential. These meters do not work with signals such as 1-5 VDC or 4-20 mA.

## • **APOLLO Series**

**APLVD**-DC Voltmeter (zero based)

**APLVA**-AC Voltmeter (zero based)

**APLID**-DC Current Meter (zero based)

**APLIA**-AC Current Meter (zero based)

**APLHV**-600VAC Meter (zero based)

**APLIT**-5 Amp AC Current Meter (zero based)

**APLCL**-Current Loop Meter (4-20 mA, 10-50mA)

**APLPV**-Process Voltmeter (+/-25VDC)

**APLSG**-Strain Gage Meter (0-2 V differential)

**APLLP**-Loop Powered Meter (4-20mA, 10-50mA)

## • **CUB Series**

**CUBVD**-DC Voltmeter (zero based)

**CUBID**-DC Current Meter (zero based)

**LPPI**-Loop Powered Meter (4-20 mA, 10-50mA)

## • **CUB4 Series**

**CUB4V**-DC Voltmeter (zero based)

**CUB4I**-DC Current Meter (zero based)

**CUB4LP**-Loop Powered Meter (4-20 mA, 10-50mA)

**CUB4CL**-Current Loop Meter (4-20 mA, 10-50mA)