

# UIP-1600-PM

## Universal Data Scanner / Logger



**AMBETRONICS**  
AN ISO 9001:2015 CERTIFIED COMPANY

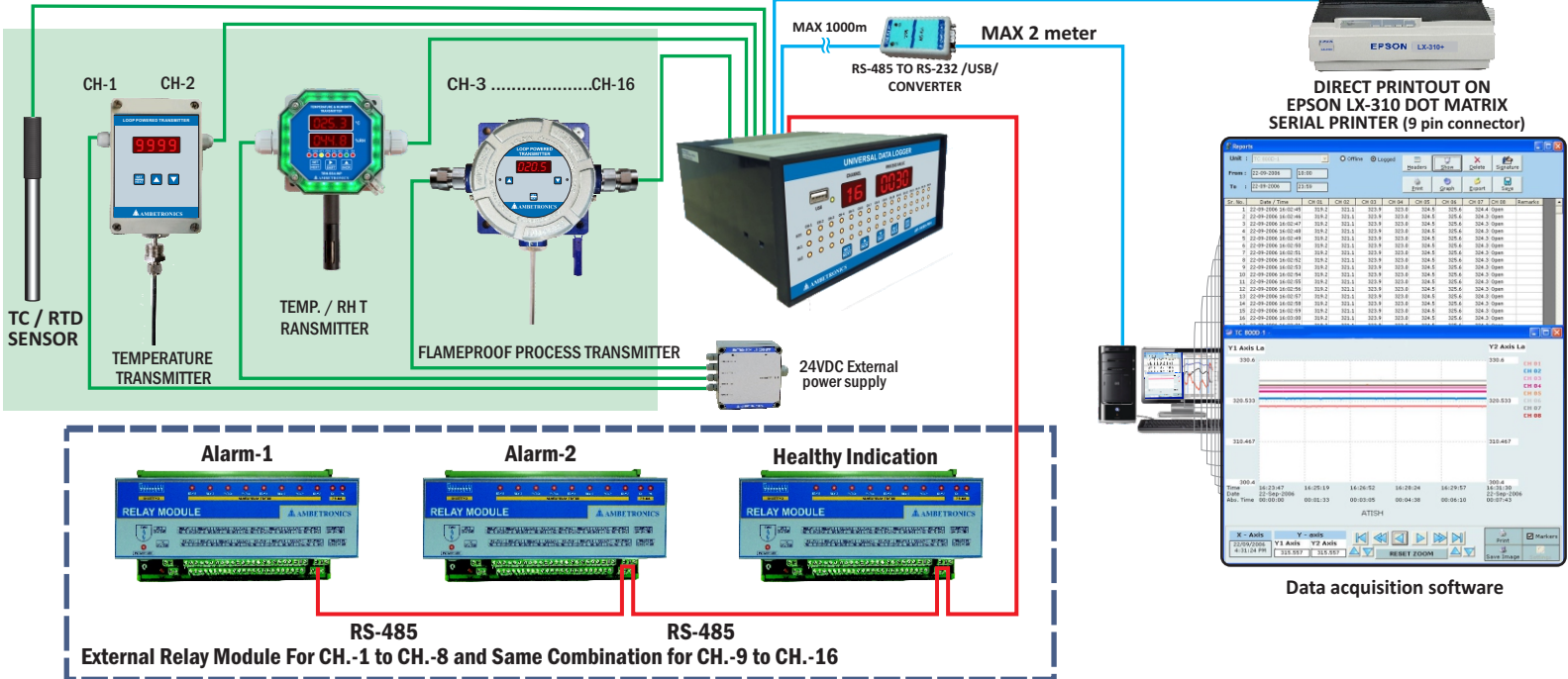
### UIP - 1600 / UIP - 1600D - PMH PANEL MOUNT HORIZONTAL



Remote Area

Safe Area / Control Room

MAX 2 meter



### Features

- Used latest microcontroller based technology for better accuracy
- 16 channel universal input for all thermocouple types (J,K,R,S,T,B,N) & RTD (PT-100), and 4-20mA programmable by user
- Easy on-line field calibration by front panel membrane keypad
- Field programmable channel scan time 1-240 sec., logging interval 1-9999 sec & printing interval 1-9999 sec.
- Remote acknowledgement facility for relays
- Optional RS-485 Modbus serial port
- Optional Serial Printing Port
- Optional USB host(For Pen Drive) for online / logged data report
- Optional Separate external relay module for Alarm-1, Alarm-2 & Healthy indication. Provided separate relay output per channel for AL1,AL2 & Healthy indication.

### Applications

- Warehouse monitoring in pharmaceutical industry
- ISO Certification records, Validation process
- Online profile recording for Oven & BOD, Incubator, Humidity Chamber
- Room Mapping in pharmaceutical warehouses
- Blood bank monitoring
- Pharmaceutical process validation with graph and excel report in Autoclaves
- Winding temperature for generators, bearing, motors, transformers
- To know heat profile in furnace, foundries for heat treatment application
- Primary & auxiliary temperature scanning of boiler
- Chemical & Hazardous area where data monitoring is essential

**MUST FOR HUMAN & INDUSTRIAL SAFETY**

# TECHNICAL SPECIFICATIONS

INPUTS	RANGE		RESOLUTION	ACCURACY
	Minimum	Maximum	NORMAL	FULL SCALE
RTD PT-100- (Resolution)	- 99.9°C	400.0°C	0.1	± 0.25%
RTD PT-100 (Without Resolution)	- 99°C	400 °C	1	± 0.25%
J - Type (Fe - CON)	-100°C	750°C	1	± 0.25%
K - Type (Cr - Al)	-100°C	1200°C	1	± 0.25%
R-Type (PT - 13%Rh / PT), S-Type (PT - 10%RH / PT)	-50°C	1750°C	1	± 0.25%
T - Type (Cu / CON)	-100°C	400°C	0.1	± 0.25%
B-Type (PT 30% Rh)	+400°C	1820°C	1	± 0.25%
N - Type	-100°C	1200°C	1	± 0.25%
4 To 20mA	- 999	9999	Programmable by user	± 0.25%

## General

- Display** : 4 digits of 13 mm height Red L.E.D 7 segment display for 'Process Value' indication 2 digit of 13 mm height Red L.E.D 7 segment display for 'Channel Number' indication
- Control Action** : Low /High control action for the Alarm 1 & Alarm 2 (user programmable)
- Setting** : Setting by 5 keypad on front panel 'SET/NEXT', '8/DECREMENT', 'ENTER/HOLD', 'ESC/ACK' for Panel Mount & WP model and push button keys for FLP model.
- L.E.D. Indication** : 8/16 Nos. RED LEDs of 3mm each for alarm 1, alarm 2, Healthy indications for CH-1 to CH-8/ CH-1 to CH-16 for UIP-800/UIP-1600 respectively.
- Set Point** : 2 independent user programmable set points for each channel with 4 common relay outputs & relay outputs common for CH-1 to CH-8/ CH-1 to CH-16 assignable to a particular channel. User settable latching for 4 common relays. If fail safe condition is needed then only 3 relays will be available for alarms.
- Relay Output** : Relay output -NO/C/NC Relay Contact rated 5A/ 230VAC, for Relay-1, Relay-2, Relay-3 and Relay-4. Remote acknowledgement facility for Relays

Note : If fail safe relay condition select yes, then we can use three relay for alarm condition.

## Performance

- Monitoring of Error Condition** : Temperature sensor 'Break / Open' display shows 'oPEr' indication. Under range 'Undr'. Over range 'oWEr' indication for RTD & all Thermocouple Inputs
- Scan Time** : 1 to 240 sec scan time between each channel; programmable by user
- Print Interval (Optional)** : 1 to 9999 Sec for Direct print out on 80 Column EPSON LX-310 Dot Matrix Serial Printer
- Logging Interval (Optional)** : 1 to 9999 Sec log interval for data logger model; programmable by user
- Logging internal memory (Optional)** : Max.8000 readings storing capacity for all 16 channel Data Logger model.

## Electrical

**Supply Voltage** : 90 to 270 VAC, 50Hz OR 110 VDC to 270VDC

## Environmental

**Operating Temperature** : -10°C To 60°C  
**Relative Humidity** : Below 95% non condensing

## Optional

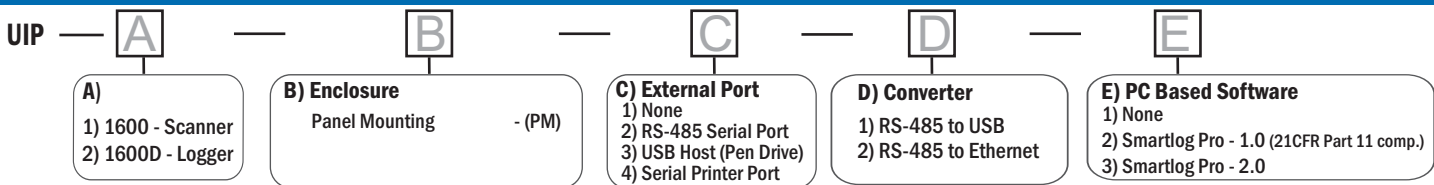
- Isolated RS-485-1 serial port with MODBUS RTU protocol output.
- Isolated RS-485-2 for External Alarm Relay Module.
- Isolated serial port for direct printout on 80 column Dot Matrix serial printer without need of Computer (PC)
- USB host (Pen Drive) connectivity for online and log data report immediate (Use FAT-32 configure Pen Drive).
- Data Acquisition Softwares for online graphs & history data reports

Note : 'c' and 'd' not available in FLP Model.

## Panel Mount Housing

- Protection Class** : IP-40  
**Cabinet Material** : ABS Plastic, Black colour  
**Cable Entry** : Terminal Connector for Connection  
**Dimension for PMH** : 96mm (H) x 192 mm (W) x 225 mm (D) (with connector)  
**Cutout for PMH** : 88 mm (H) x 182 mm (W)  
**Mounting** : Panel Mounting  
**Weight** : Approx 1.5Kg

# ORDERING INFORMATION



NOTE : • Optional Relay Module card for both Scanner and Logger • For any customize requirement contact factory

Manufactured by :



**AMBETRONICS ENGINEERS PVT. LTD.**

17-B, 16, 14A, Tarun Industrial Estate, New Nagardas Road, Mogra Pada, Andheri (E.) Mumbai - 400 069, India.

+91-22-69623389 +91-93207 37646 sales8@ambetronics.com  
 +91-22-61673021/22 +91-91674 18106 sales11@ambetronics.com



Version : UIP-1600-PM-R1-10-01-2024

Specifications subject to change without any prior notice