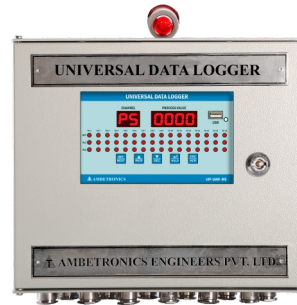




**UIP - 1600/1600D - PMH**  
PANEL MOUNT HORIZONTAL



**UIP - 1600/1600D - WP**

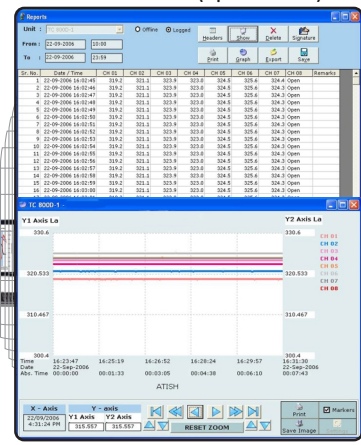
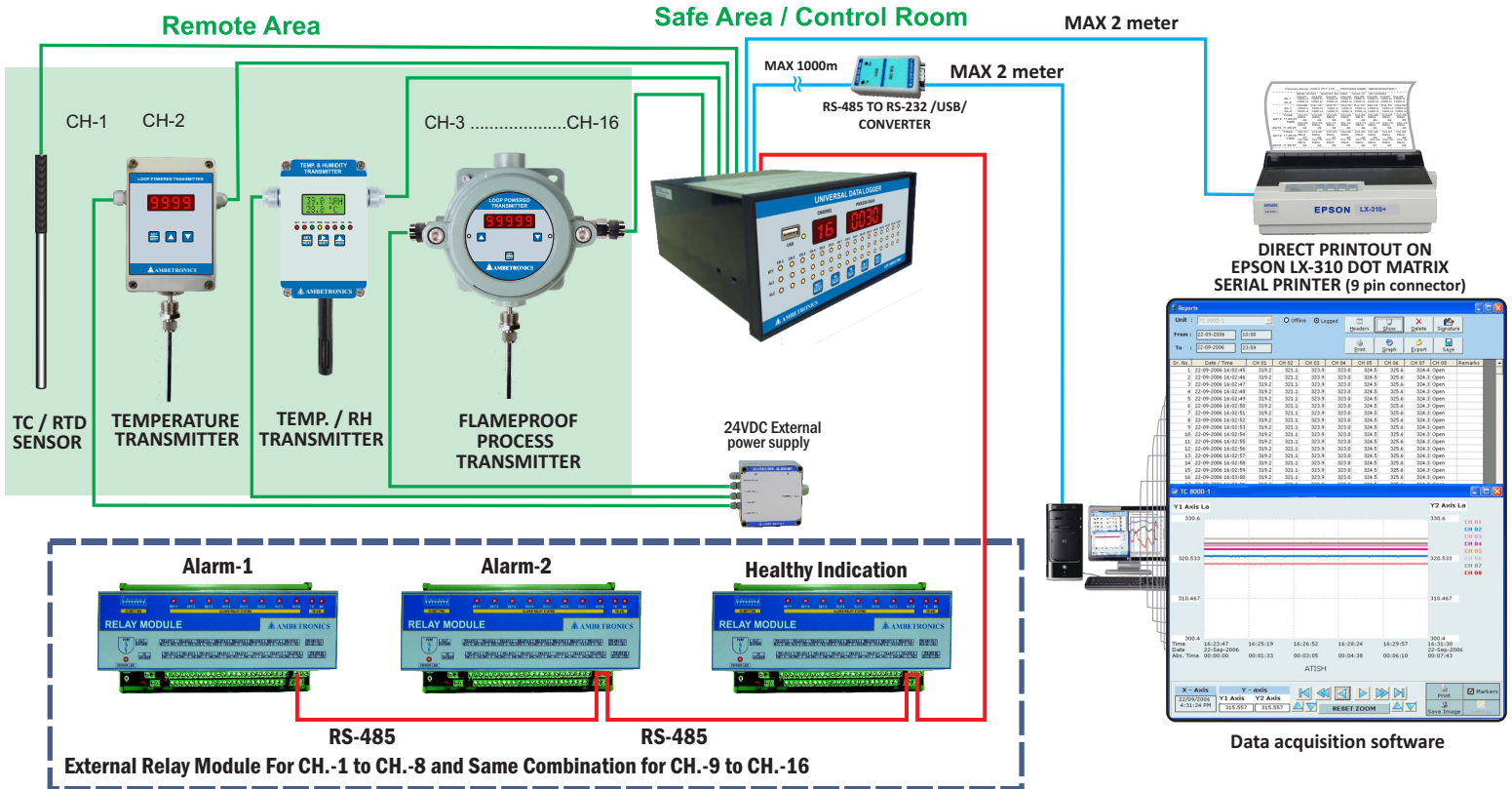


**UIP - 1600/1600D - MS**



**UIP - 1600/1600D - FLP**

CIMFR Tested & PESO Approved Encl.



Data acquisition software

### 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.

### Approval & Compliance

CIMFR TR NO : CIMFR/TC/P/1923 Dt. 26/08/2019 Almasphere Zone 1 and Zone 2  
 PESO CERT. NO. : P468728/1 Dt. 251/02/2020 including Gas group IIA, IIB & IIC  
 BIS MARK LICENCE NO. : 7800046916 IS/IEC 60079 - 0 : 2011  
 IS/IEC 60079 - II : 2006  
 IS/IEC 60529 : 2001 (IP-66)

### 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

# 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 'oUEr' 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
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## 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

## Weatherproof Housing

Protection Class	: IP-65
Cabinet Material	: ABS Plastic
Cable Entry	: Thermoplastic cable gland (IP 65) with clamping range of 2.5 to 6.5 mm
Dimension	: 317 mm (H) x 365 mm (W) x 160 mm (D)
Mounting	: Wall Mounting / Stand Mounting
Weight	: Approx 2.5Kg

## Flameproof Housing

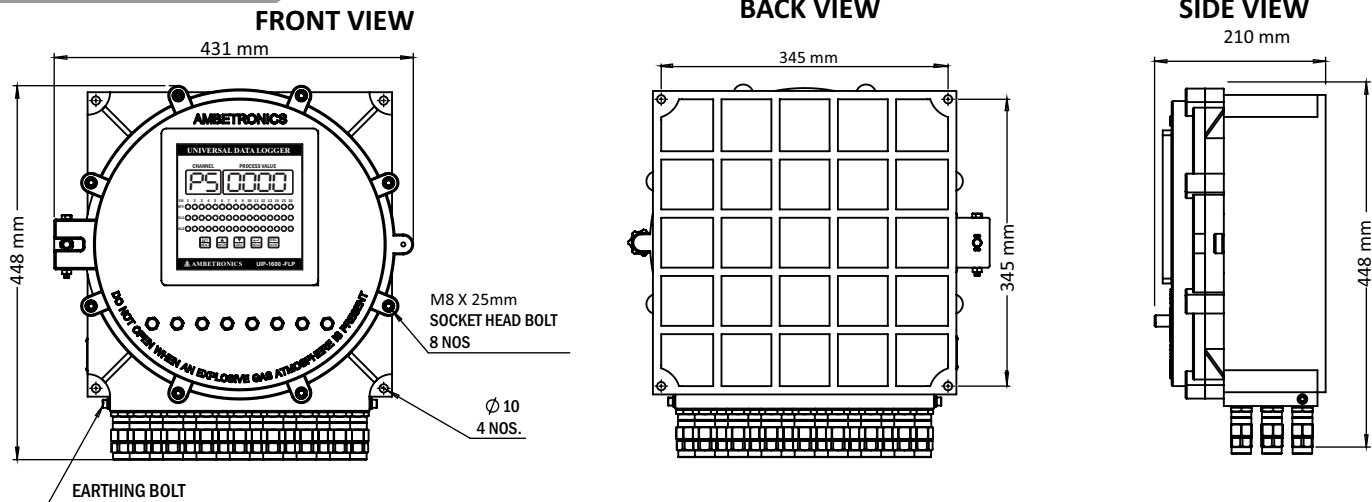
Degree of Protection Class	: IP-66
• CIMFR CERTIFICATE NO.	: CIMFR/TC/P/1923 Dt : 26/08/2019
• PESO CERTIFICATE NO.	: P468728/1 Dt : 21/02/2020
Housing Material	: cast Aluminum Lm6 Alloy or cast Iron (C.I.) Enclosure
Cable Entry	: Flameproof, Weatherproof IP66 Double compression cable gland (Ex d) Model No. : CG/FLP/2C M20 x 1.5 (P) & M25 x 1.5(P), ½" NPT & ¾" NPT
• CIMFR CERTIFICATE NO.	: CIMFR/TC/P/1313 Dt : 19/09/2018
• PESO CERTIFICATE NO.	: P431645/2 Dt : 19/11/2019
Dimension	: 356 mm (H) x 316 mm (W) x 183 mm (D)
Mounting	: Wall Mounting / Stand Mounting
Weight	: Approx 12 Kg

## MS Panel Housing Details :

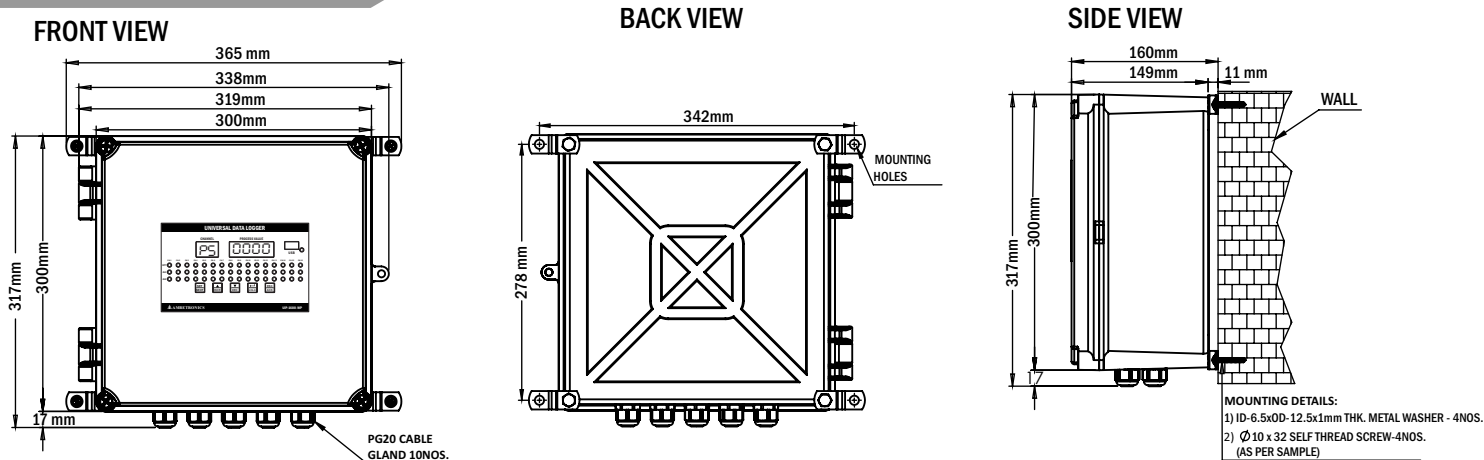
Protection Class	: IP-50
Cabinet Material	: Metal sheet Siemens Grey colour
Cable Entry	: Single Compression Gland
Dimension	: 275 mm (H) x 320 mm (W) x 100 mm (D)(without gland)
Mounting	: Wall Mounting / Stand Mounting
Weight	: Approx 6.1 Kg

# DIMENSIONAL DETAILS

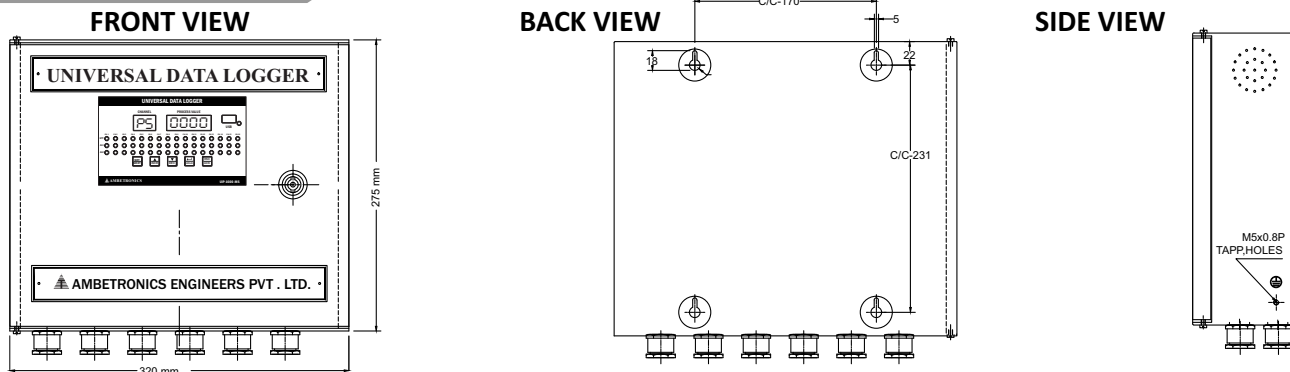
## FLAMEPROOF ENCLOSURE



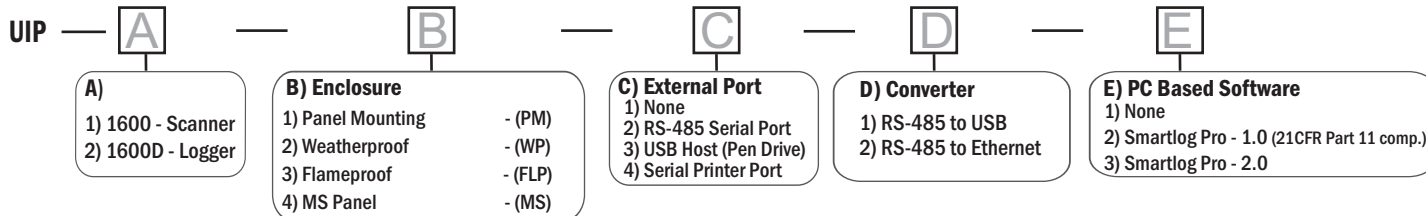
## WEATHER PROOF ENCLOSURE



## MS PANEL



# 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, Tarun Industrial Estate, Mogra Pada, New Nagardas Road, Andheri (E), Mumbai - 400 069, India.

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Specifications subject to change without any prior notice