

DATA SCANNER / DATA LOGGER



**TC - 1600F / TC - 1600FD
PANEL MOUNT**



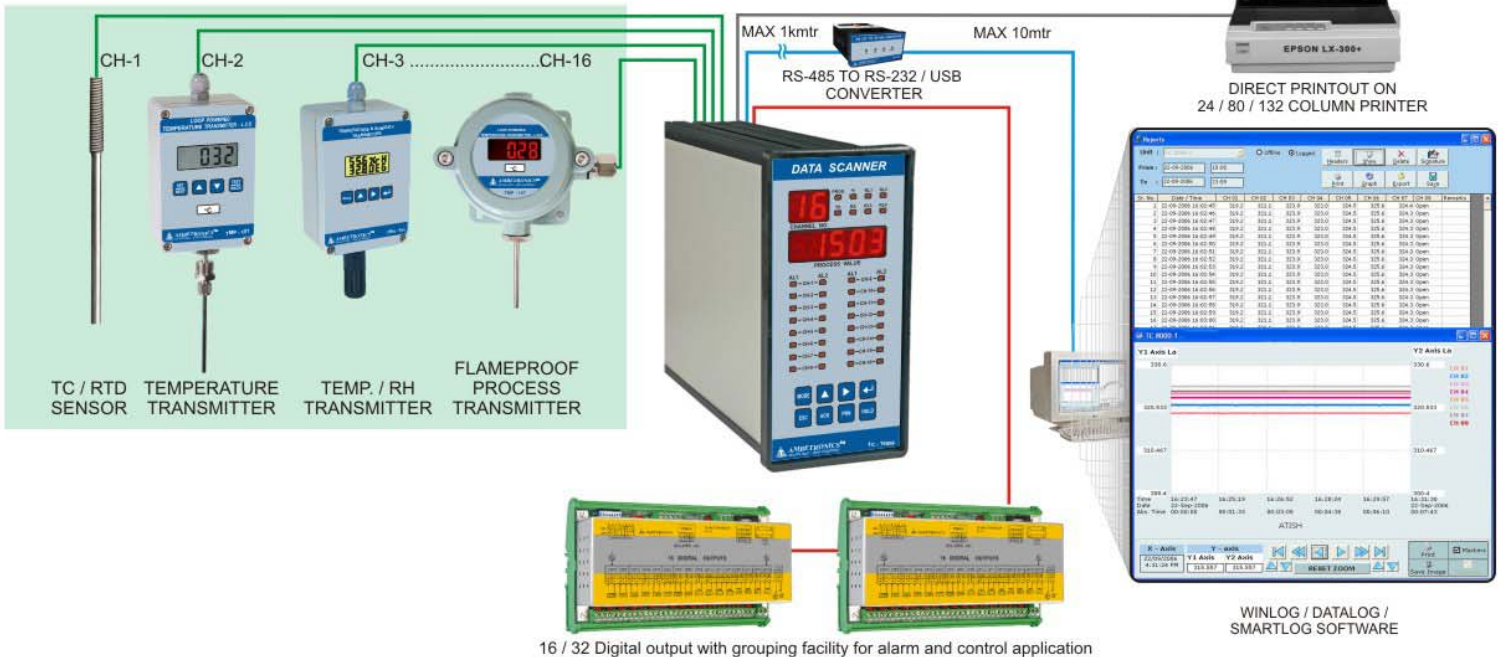
**TC - 1600F / TC - 1600FD - WP
WEATHERPROOF**



**TC - 1600F / TC - 1600FD - FLP
FLAMEPROOF**

Remote Area

Safe Area / Control Room



Features

- Used latest micro controller based technology for better accuracy
- 16 Channel fixed input for all thermocouple, J, K, R, S, T, E, B, N programmable by users, and Fixed Inputs for RTD (PT-100/CU53), 4-20mA, 0 - 10 VDC factory settable
- Easy on-line field calibration by front panel membrane keypad
- Field programmable channel scan time 1 to 59 sec., Logging interval 1 to 9999 sec & Printing Interval 5 to 9999 sec.
- Field programmable Delay time 1 to 99 sec. for Relay Output
- Optional RS-232 / RS-485 Modbus Serial Port
- Optional Parallel / USB Printing Port

Applications

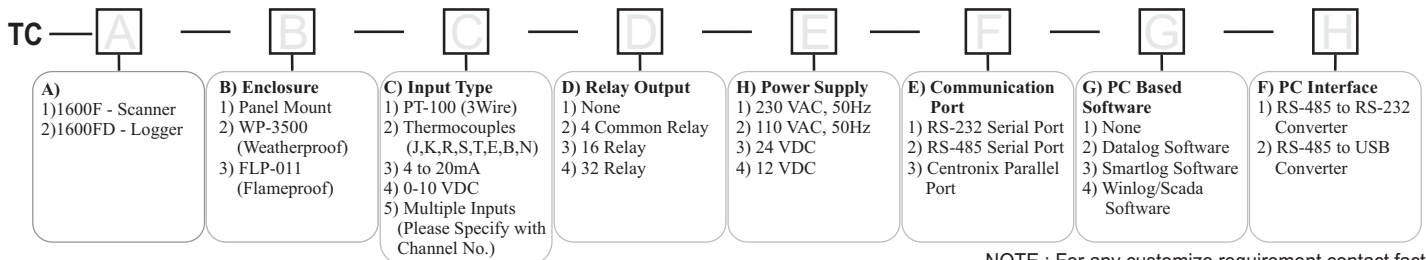
- ISO Certification records, Validation process certifying
- Pharmaceutical process validation with graph & excel report in Autoclaves
- Online profile recording for Oven & BOD, Incubator, Humidity Chamber
- Winding temperature of generators, Bearings, motors, transformers
- To know heat Profile in furnace,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

MUST FOR YOUR PROCESS

TECHNICAL SPECIFICATIONS

INPUTS	RANGE		RESOLUTION	ACCURACY
	Minimum	Maximum	NORMAL	FULL SCALE
RTD PT-100 (3 WIRE)	- 200.0°C	400.0°C	0.1	± 0.25%
RTD (Cu-53)	- 50.0°C	150.0°C	0.1	± 0.25%
J - Type (Fe - CON)	- 50.0°C	600.0°C	0.1	± 0.25%
K - Type (Cr - Al)	- 50.0°C	500.0°C	0.1	± 0.25%
K - Type (Cr - Al)	- 100°C	1300°C	1	± 0.25%
R-Type (PT - 13%Rh / PT), S-Type (PT - 13%Rh / PT)	0°C	1750°C	1	± 0.25%
T - Type (Cu / CON)	- 200°C	400.0°C	0.1	± 0.25%
N-Type, E-Type (Cr / CON)	0°C	1300°C	1	± 0.25%
B-Type (PT 6% Rh / PT 30% Rh)	400°C	1820°C	1	± 0.25%
4 To 20mA / 0 To 20mA	- 9999	15000	Programmable By user	± 0.25%
Voltage (0 To 1 VDC / 0 To 10 VDC)	- 9999	15000		± 0.25%
Display	5 digits of 13 mm Height Red L.E.D display for 'Process Value' indication			
	2 digit of 13 mm Height Red L.E.D display for 'Channel Number' indication			
L.E.D. Indication	32 Nos Red L.E.Ds of 3 mm for Alarm Indications AL1 & AL 2 Individual for each channel			
Set Point	2 independent set points for each channel with 4 common relay outputs & programmable latch / non-latch facility for 4 common relays & Alarm indications			
Control action	HI - LO, LO - Very LO, HI-Very HI; programmable by user			
Relay Output	1 NO/C/NC Relay Contact Rated 230VAC/5A for four Relay			
Setting	Setting by 8 keys on front panel 'MODE', 'SHIFT', 'INC', 'ENT', 'PRN', 'ACK', 'ESC', 'HOLD'			
Scan Time	1 to 59 sec scan/scroll time between each channel; programmable by user			
Print Interval (Optional)	5 to 9999 Sec for Direct print out on 24 / 80 / 132 Column Dot matrix Printer			
Logging Interval	1 to 9999 Sec login interval in data logger model; programmable by user			
Memory	Max. 3000 readings storing capacity for all 16 channel in Data Logger model			
	Memory saturation, Memory Scrolling (FIFO) & Online PC Interface available in Data Logger model			
Monitoring: Sensor	Temperature sensor 'Break / Open' display shows 'bPEn' indication			
Open / Under / Over	Under range 'uNdr'. Over range 'OvEr' indication for RTD & all Thermocouple I/Ps			
Supply Voltage	230 VAC ±10%, OR 110 VAC ±10% OR 24 VDC OR 12 VDC			
Operating Temperature	- 40 To 85 °C		Relative Humidity : Below 95% non condensing	
Enclosure Details	Panel Mount	Weatherproof	Flameproof	
Protection Class	IP-40	IP-65	IP-65, CMRI for IIA & IIB Gas Group	
Cabinet Material	MS, Aluminium powder coated	Polycarbonate, gray colour	Cast Aluminum alloy, LM-6 / C.I. Enclosure	
Cable Entry	Terminal Connector for Connection	Thermoplastic cable gland (IP 68)	Double compression cable gland, ¾" ET-type	
Dimension	192(H) X 96(W) X 200(D) in mm	305(H) X 325(W) X 170(D) in mm	450(H) X 390(W) X 170(D) in mm	
Cutout	188(H) X 92(W) in mm	- - - -	- - - -	
Mounting	Panel Mount	Wall Mounting / Stand Mounting	Wall Mounting / Stand Mounting	
Weight	Approx 1.5Kg	Approx 3.5Kg	Approx 15Kg	
Optional	a) Isolated RS-232 / RS-485 Serial Port with MODBUS RTU Protocol output. b) Isolated Parallel port for direct printout on 24/80/132 column Dot Matrix printer without need of Computer (PC) c) SMARTLOG / DATALOG / SCADA Data Acquisition Softwares for online graphs & history data reports d) Individual Relay output or Grouping Relay output can be given for each channel			

ORDERING INFORMATION



NOTE : For any customize requirement contact factory

Ambetronics Engineers Pvt. Ltd.

17-B, Tarun Industrial Estate, Mogra Pada, New Nagardas Road, Andheri (East), Mumbai-400069, India.

Tel. : +91-22-66995525, 28371143, Fax : +91-22-28226570

Mob. : 09324571143, Website: www.ambetronics.com

E-mail : sales@ambetronics.com, ambetronics@vsnl.com

DEALERS :