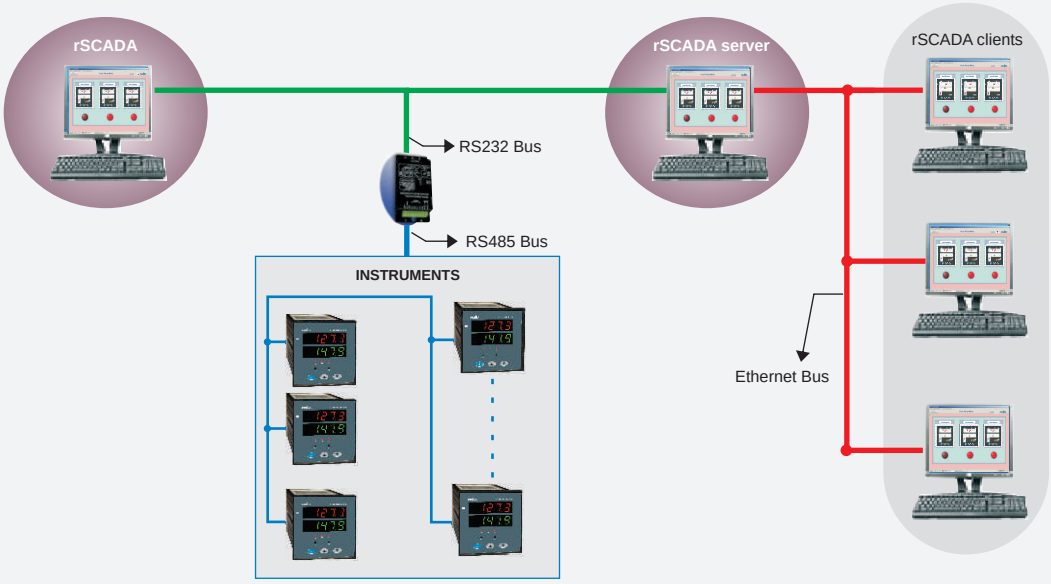
TR METER — ISOTHERM

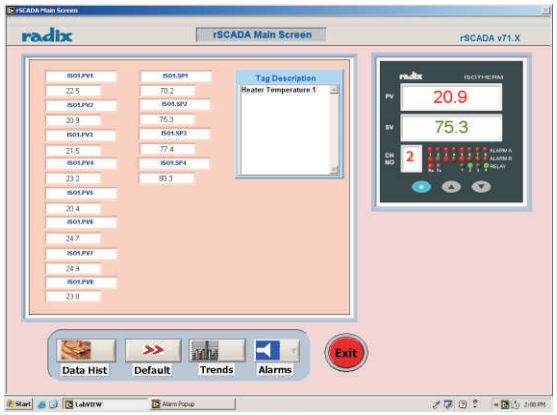
4-20mA OUT, RS485 — **VER : 32.XX**

- T1, T2 & Flow inputs
- Specific Heat & Specific Gravity, user programmable
- 4~20 mA out for TR
- RS485 with MODBUS RTU
- 3 key, 5 level programming
- Tactile membrane keypad
- 85~265 V AC SMPS
- Powerful, flexible SCADA software available

rSCADA Basic

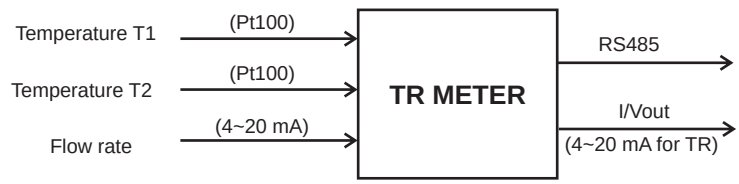
rSCADA with Ethernet





- Flexible trend facility - current and historical
- Alarm function
- Allows read (acquire data) & write (program setpoint, etc) operations
- Supports upto 32 or more instruments
- Capable of storing data upto 10 years
- Compatible with a variety of Radix instruments such as Scanner, PID & ONOFF controllers, Isolators
- Default screen selection
- 21CFR compliant version also available

TR **VERSION 32.XX** — **Fig 1**



TR METER — ISOTHERM

4-20mA OUT, RS485 — VER : 32.XX

SPECIFICATIONS

All specifications at ambient of 25 °C, unless specified otherwise

INPUTS

No. of inputs	3
Input types	
Input 1	Pt100, 3-wire or 4~20 mA*
Input 2	Pt100, 3-wire or 4~20 mA*
Input 3	4~20 mA from flow transmitter*
Channel scan rate	< 0.8 seconds for 8 channels
Channel-to-channel isolation	Suitable for low (leakage) voltages less than 3V AC
Input protection	
RTD inputs	± 10 V DC max
Current inputs	Current limit < 30 mA, 28 V DC max
Range limits	See Table 1
Accuracy	See Table 1

INDICATION

Display type	0.56" (14.2 mm), 7 - segment LED
TR	Upper window, 4 ½ digit : red
T1, T2, Flow (Scanned)	Lower window, 4 ½ digit : green
Status indication	3 red LEDs for displayed parameter 2 red LEDs for communication

OUTPUTS

Current output	4~20 mA / 0~20 mA, isolated from input and supply
OR	
Voltage output	0-1 V / 0-10 V / user specified
Maximum load for current output	500 ohms

ISOLATION

Mutual isolation between input/supply/curent output/ RS485 port	1KV AC RMS/1 minute, 250 V AC RMS continuous

COMMUNICATION

Port	RS485, isolated
Baud rate	User programmable, 4800 bps, 9600 bps, 19200 bps, 38400 bps
Protocol	Modbus RTU
Slave ID	User programmable, 1~255
Minimum polling interval	250 milliseconds
Parameters	
Process variables	Read only

PROGRAMMABLE PARAMETERS

Unit	User programmable
Resolution	User programmable 0.0001,0.001,0.01, 0.1or 1 for linear input, 0.1 or 1 for temperature
Specific heat	0.50 ~ 1.00
Specific gravity	0.75 ~ 2.00

OTHER MAJOR PARAMETERS

Level lock	
Display scan rate	1~99 seconds/channel
SKIP channel	Enable / disable
Input bias	-12.5 ~ 12.5

CALIBRATION

Zero & span	Through front panel keys & display
User calibration	Sensor span and sensor zero

OTHER

Keypad	Membrane, tactile, 3 keys
Memory for programmed parameters	Non-volatile, indefinite duration
Field Connections	Screw type connections in plug-in terminals
Plug-in Terminal Type	a) Standard (Brass nickel plated) b) Gold plated
Supply voltage	85~265 V AC, 50/60 hz
Power consumption	5 watts
Dimensions (in mm)	96 (H) x 96 (W) x 220 (D)
Mounting	In panel cutout of 92x92 mm
Operating ambient temperature	0 - 50 °C
Relative humidity	Below 90%, non condensing

* Supply for 2-wire transmitter to be provided by user

TABLE 1

SENSOR / INPUT	RANGE LIMIT (°C / EU)		RANGE IN WHICH ACCURACY IS SPECIFIED		TYPICAL ACCURACY AT 30 °C (°C / EU)	WORST CASE ACCURACY (°C / EU)
	LOW SCALE	HIGH SCALE	LOW SCALE	HIGH SCALE		
Pt100, 3-wire	-200	850	-200	850	± 0.5	± 1.0
Linear (0~20 mA, 4~20 mA)	0	19999	0	19999	± 10 EU	± 50 EU

ORDERING INFORMATION

2241 | A | B | C | D

A	Analog output
0	None
1	0/4~20 mA
2	0~10 V DC
3	Other*

* Please specify

B	Communication
0	Not provided
1	RS485, isolated

C	Supply voltage
0	85~265 V AC/DC

D	Plug-in terminal type
0	Standard (Brass nickel plated)
1	Gold plated

radix®
AN ISO 9001:2008 COMPANY

SALES INQUIRIES
1800-22-radix
1800-22-7234

www.radix.co.in

Radix Electrosystems Pvt Ltd
B-14, 2nd Floor, Ghanshyam Indl Estate
Veera Desai Road, Andheri (W)
Mumbai - 400053, India
Tel : + 91 22 26730101 / 42537777
Fax : + 91 22 26731891 / 42537700
Email : sales@radix.co.in · www.radix.co.in

BANGALORE	C : 0-9341063830	GOA	C : 0-9371439090	NAGPUR	C : 0-9322245543
BARODA	C : 0-9376215882	GWALIOR	C : 0-9301995060	NEW DELHI	C : 0-9312600076
CHANDIGARH	C : 0-9316460869	HP	C : 0-9316460869		T : 011-25786350
CHENNAI	C : 0-9381056345	HYDERABAD	C : 0-9391053480	ORISSA	C : 0-9337002344
CHHATISGARH	C : 0-9337002344	INDORE	C : 0-9301995060	PUNE	C : 0-9371113404
COIMBATORE	C : 0-9380284497	KARNATAKA	C : 0-9341063830		T : 020-24479759
GANDHIDHAM	C : 0-9377546388	KERALA	C : 0-9349342306	PUNJAB	C : 0-9316460869

CAT#344R2/P2/2/310310/A