

STEAM / MASS FLOW COMPUTER & TOTALIZER



96 X96 TOUCH LCD



96 X96 16 X 2 LINE LCD



IP-55,65 HOUSING-FIT



FLAMEPROOF HOUSING-FIT

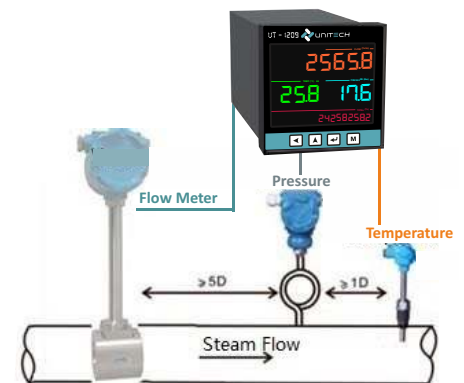
- Com. Protocol- RS-485 / Ethernet TCP/IP / Wireless RF / GPRS-GSM
- Flow Monitoring and Data Logging SCADA Available

INTRODUCTION

UT-1409's Are Designed To Measure The Flow Rate Of Superheated Steam & Saturated Steam In Mass Or In Terms Of Normalized Volume. These Flow Meters Compute Compensated Steam Flow By Receiving Input From Vertex Flow Meter, Volumetric Flow, Orifice Plate, ISO 5167 Computation, Ventures & Variable Computations. It Computes Instantaneous Density From Pressure & Temperature Signals As Per ASTM Norms & Computes The Mass Flow. These Instruments Can Easily Interfaced To SCADA Or DCS Systems With Various Options Like Analog Signal Re-Transmission And RS-485 & Ethernet MODBUS Output.

FEATURE

- ★ Multi Parameter Auto Scroll Display Like Steam Press., Temp., Nm³ And Sm³.
- ★ The Instrument Can Be Configured To Work On SATURATED Or SUPERHEATED Or BOTH.
- ★ Accepts Up To Three Inputs – FLOW (mA), PRESSURE (mA), TEMPERATURE (mA/RTD PT-100).
- ★ Non-Volatile Memory To Retain Totalized Flow, No Need Of Battery To Change.
- ★ Gives Efficient Pressure And Temp.(On Line Density) Compensations For Mass Flow Calculation.
- ★ Calculates Flow Rate In Nm³/Hr. Or Sm³/Hr. As Selected.
- ★ Liner Or Square Root Input Selection With 0.1% Accuracy.
- ★ Isolated 0/4-20ma Re-Transmission Output Proportional To Standard Flow Rate.
- ★ Field Operated User Friendly Menu For Device Configurations & Calibration.
- ★ 8/10 Digit Flow Totalizer With Password Protected Reset.
- ★ Fully Password Protection For Tamper Free Operation.
- ★ Isolated High Speed Communicative Serial Interface Facility (RS-232/485).
- ★ 2 Nos. 24 V DC Loop Power Supply For Flow & Pressure Transmitter.
- ★ Optional GSM Mobile Connectivity For Wireless Remote Access (SMS).Flow Meter Computer Software Available.
- ★ Weather Proof Or Flame Proof Housing.
- ★ Linear Or Square Root Option And Automatic Unit Changeable.



STEAM FLOW COMPUTING SCHEME

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TECHNICAL SPECIFICATION

INPUT	Input Type	Flow :	0-4 ~ 20 mA Dc, 0-10 V DC Pulse - 3 Wire PNP/ 2 Wire Namur Type
		Pressure :	4-20mA Dc / 0 - 10V Dc Or Other Linear Type
		Temperatures :	RTD Pt.- 100, 4-20mA Dc / 0 - 10 V Dc Or Other Linear Type
	Transmitter Power Supply	24 V DC @ 30 mA Max, Isolated From I/P & O/P	
	Input Mode	Linear Or Square Root	
	Range Limits	As Per Input Range Table	
	Accuracy	+/- 0.1 % Of Span For Linear & RTD, +/-0.25 % For T/C	
Input Impedance	>330 K For Voltage ,mV, And T/C, 100 R For Current		
INDICATION	Indication	Touch LCD Type :	3.5 Inch Touch Screen 5 Digit Flow Rate & 10 Digit Totalizer.
		LCD Type :	5 Digit Flow Rate & 10 Digit Totaliser-16x2 Line Back Lite
	Status Indication	LEDs For Relay Status & Communication	
Alarm Modes	Very Low / Low / High / Very High		
MASS CALCULATION	MASS CALCULATION FOR GAS- AIR	Gas : AGA-9/11, & For Orifice Or Venture Flow Meter	
	MASS CALCULATION - STEAM	Steam : NX-11 Auto Super Heated And Saturated Steam	
OUTPUT	Relay Output	NO - C - NC Contacts , 5A@240 V AC Resistive	
		2 Relay Output For Fine And Corse Output	
	Transmitter Power	24 V DC @ 20 mA , 12 V DC @ 20 mA	
Retransmission Current & Voltage Outputs	0~20/ 4~20 mA, 0~ 5 V , 0~ 1 0 V , 1~ 5 V DC, Fully 3 Port Isolated		
COMMUNICATION	Communication Protocol & Method	Modbus RTU RS- 485/RS- 232 or Ethernet Communication	
	Programmable Parameter & Max No.	Baud Rate, Parity , Node Address , Stop Bit & 0-256 Unit	
	Wireless Communication	GSM/GPRS Base Mobile(SMS) Communication	
PROGRAMMABLE PARAMETERS	Set point / Hysteresis / High Scale / Low Scale	Full Range As per Input Selection.	
	Relay Logic	F.S. high & low alarm, Dead band alarm	
	Display Resolution	-1999 to 9999 Fully Configurable For Linear Input	
	Programming Of Parameters	Through 4 Tactile Keys	
OTHER	Dimensions & Mounting	As Per Box Selection & Wall/Structure 2/2 Holes	
	(A) Supply Voltage (B) Power Consumption	(A) 110/230 AC /24 V DC, 50/60 Hz (B) 4 Watts Maximum	
	Operating Ambient Temperature And Humidity	0~50 °C , And Humidity : Below 90%, Non Condensing	

ORDERING INFORMATION :

UT-1209		1	2	3	4	5	
Ext. Housing			Input Type	Output	Power	Comm.	
Panel Mounting-LED	P1	2 X 4-20 mA & 1 RTD	1	None	N	None	N
Panel Mounting-Touch	P2	3 X 4-20 mA DC	2	4-20mA	C	RS485	4
Field Mounting (Wall)	W			0-10/5V	V	Ethernet	2
Flame proof housing	F			Special	T	GSM	1