

LF - 1000

FLOW RATE INDICATOR CUM 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

Flow Indicator Totaliser LF - 1000 is compact and easy to use, designed for monitoring the continuous flow rate and total flow. The flow rate along with engineering units is displayed on the upper line of LCD/LED display and the totalizer flow is displayed on 8/10 digits on the second line. The micro controller based design makes it more flexible and powerful compared to conventional flow totaliser. The unit is suitable for use with any flow transmitter giving pulse or analog current output. The display has floating decimal point position, which is programmable from the front panel. The unit has inbuilt relay outputs for Flow rate and Totaliser of alarm or control application.

LFIA Flow totaliser are available for liquid and gas duties and are available as field/ wall mounting or alternatively in an explosion proof housing to the latest international standards and will work with orifice any type of flow meter. Options include pulse and/or 4-20mA retransmission or communications outputs to printers or SCADA control systems.

FEATURES

- ✦ Accepts Universal inputs – 4-20 mA or 0-10 V or pulse (3 & 2 wire) input type.
- ✦ Non-volatile memory to retain totaliser flow, no need to battery change.
- ✦ Potential Free Relay contact output 2 x Flow and 2 x Totaliser.
- ✦ Liner or Square root input selections with 0.1% Accuracy.
- ✦ Isolated 0/4-20mA retransmission output proportional to standard flow rate.
- ✦ Field operated user friendly menu for device configurations & calibration.
- ✦ 8/10 digit Flow Totaliser with password protected resetting.
- ✦ Fully password protection for Tamper free operation.
- ✦ Isolated Highly communicative serial interface facility (RS 232/485).
- ✦ 24 V loop power supply for Flow Transmitter.
- ✦ Optional GSM mobile connectivity for wireless remote reading purpose.(SMS)
- ✦ Flow Metering computer software Available.
- ✦ Weather proof or flame proof housing.

APPLICATIONS

- ✦ Chemical Batching int
- ✦ Hazardous Areas
- ✦ Tank Farm Level Monitoring
- ✦ Brewery Batch Controllers
- ✦ Oil Storage Depot Deliveries
- ✦ Effluent Discharge Metering
- ✦ Storage Tank Steam Trace
- ✦ Heating
- ✦ Crude Oil/Water Cut Measu.
- ✦ High Pressure Gas Transfer
- ✦ Terminal Automation Software
- ✦ LPG Distribution
- ✦ BULK SOLVENT DELIVERY



TECHNICAL SPECIFICATION :

INPUT	Input Type	Current : 0 ~ 20mA DC , 4~20mA DC Voltage : 0-5V/1-5V, 0.5 -2.5V/0- 10V DC Pulse : 3 wire PNP, NPN & 2 wire NAMUR 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
Status indication		LEDs for Relay status & Communication
Alarm modes		Very Low / Low / High / very High
CONTROL MODE	On Off control	Relay / SSR
	Dead Band controls	High and Low Set point for level application
OUTPUT	Relay Output	NO - C - NC Contacts , 5A@240 V AC Resistive
	SSR Output	1 / 2 Relays / SSR output
	Transmitter Power	24VDC @ 20 mA ,12VDC @ 20 mA
	Retransmission Current & Voltage outputs	0~20/ 4~20 mA, 0~5V, 0~10V, 1~5V 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	Setpoint / 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/24VDC, 50/60 Hz (B) 4 watts maximum
	Operating ambient Temperature and Humidity	0~50 °C , and humidity : Below 90%, non condensing

ORDERING INFORMATION :

LF - 1000	1	2	3	4	5	6	7	8
Ext. housing	P	SIZE	INPUT	Relay -Flow	Relay -Total	Output	Power	Comm.
Panel Mounting	P	96 X 96-LCD	4-20mA	None N -	None N -	None N	230V AC	None N
Field Mounting (Wall)	W	96 X 46-LCD	0-10/5/1V	Relay R 1•2	Relay R 1•2	4-20mA C	110V AC	Rs485 4
Flame proof housing	F	96 X 96- Touch	Pulse			0-10/5V	24V DC	Ethernet 2
			Special			Special		GSM 1