Rate A : 1000
Rate A+B : 2500

PROG | VIEW | PRE A | CLR PRE B | ENT LOCK | RST

Flow Rate Indicator / Totalizer featuring

▶ Compact 1 / 8 DIN size case

▶ Two pulse and three control inputs

▶ 2 relays (NO) of 5 A and 250 V *OR* 2 Open Collector Outputs; 100 mA maximum

▶ One 4-20 mA analog output

▶ RS232 / RS485 port for serial communication and printing

▶ Password security for function keys

▶ + 24 V DC unregulated O/P for AC powered unit

▶ NVRAM to retain data on power failure

▶ Both inputs can have up-to 16 points linearizing K factor

RTP-LCD is a Rate meter / Totalizer / Batcher from two pulse inputs. It can show rate and total at the same time on the 16 X 2 backlit LCD. Both inputs can have up-to 16 points linearizing K factor. The unit can be connected in a network for Data Acquisition.

Specifications:

Input Power	:	AC: 80 to 240 V; 6.5 VA	Size	:	Bezel: 61 H X 109 W
		DC: + 24 V DC			X 100 D mm
Input Current	:	250 mA DC maximum	Panel cutout	:	44 H X 92 W mm
Output Power	:	+ 24 VDC ± 10%, 2 W Max.	Immunity to ESD	:	Level 3 as per IEC1000-4-2
Display	:	2 lines of 16 characters back lit LCD	Immunity to Transients	:	Level 3 as per IEC1000-4-4
Bezel	:	IP65 rated membrane keypad	Immunity to Radiated RF	:	Level 3 as per IEC1000-4-3
Temperature	:	Operating: 0 to 50^0 C	Immunity to Conducted RF	:	Level 3 as per IEC1000-4-6
		Storage: -20 to 80^0 C	Emissions	:	EN55011 CISPR A
Humidity	:	10% to 90% (Non condensing)			

● Basic Operations

Pulse Inputs
The RTP-LCD can accept two pulse inputs (A & B). It computes rate and total of A, B, A+B and A-B.
The rate is computed within 300 ms per input. To stabilize the rate display, the user can select normalizing factor, which allows weighted average to be shown.

Control Inputs
The RTP-LCD has three Control Inputs (for RS232 only), i.e. Input C, Input D and Input E. The Control inputs are isolated. Each input can be configured to start/stop each counter or reset each counter and Control Output. These inputs can also perform different control actions like printing on serial port, lock unit and freeze display.

Reset Options
The entire unit, i.e. all counters and control outputs, or Counter A, Counter B, Counter A+B, Counter A-B, Control O/P A and Control O/P B can be individually programmed to be reset on pressing the front panel RST key and also through any of the Control I/Ps C, D and E.

Presets
The unit supports five counters, i.e. Counter A, Counter B, Counter A+B, Counter A-B and the Grand Total. The counters can either be reset to zero, set to preset or can be disabled. Counter A and B can be programmed to count UP or count DOWN. The two relays can be programmed to track the counters in Timed mode. If Low preset is selected, the relays will energize when the count goes below the preset value and they will remain energized till the programmed time is over. On the other hand, if high preset is selected, then the relays will energize when the count goes above the preset value and they will remain energized till the programmed time is over. The two relays, A and B can be programmed to track the rate in the Hysterisis mode. In this mode, both the Low and the High preset values of the Hysterisis have to be given.

Serial Communication
The serial port can be used for serial printing or also for data acquisition. The unit can communicate with a master device through a Modbus-RTU protocol.

Lockout
The unit program and presets can be protected with a Lock code to prevent unauthorized front panel changes. This code can be assigned with a maximum of 4 digits and is user selectable. It can be entered through front panel LOCK key *OR* by configuring any of the Control I/Ps to "Lock unit".
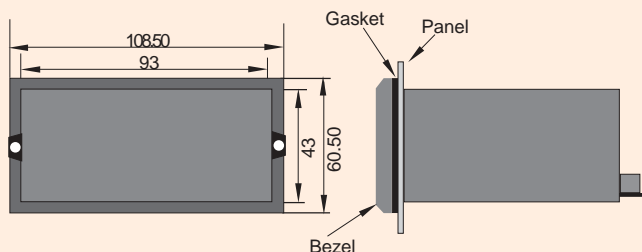
Function Keys
The RTP-LCD has 6 keys. The table below gives a brief description of the keys and their functions:

PROG	Enter PROG mode	Toggle between menus
VIEW	View key to scroll between selected viewing parameters	Left key to shift digits in numerical entry/ character in Message mode
PRE A	PRE A key for Preset A to be changed if unit is not locked	UP key to increment digit/ character selection
CLR	PRE B key for Preset B to be changed if unit is not locked	CLR key clears the numerical field
ENT	Lock key to enter Lock Code to Lock/ Unlock the unit	ENT key to save changes and proceed
RST	Reset counters (With or without confirmation)	Unit comes out of programming at any level

The RST (Reset) key on the front panel is used to reset the value selected in the reset menu. If the unit is chosen to reset, then all the counting parameters are reset.

● Dimensions

● Models

Model	Output	Power Supply
RTP-LCD-B-N-R-00	Relay (NO)	+ 24 V DC ± 10%
RTP-LCD-B-N-C-00	Open Collector	+ 24 V DC ± 10%
RTP-LCD-B-N-R-01	Relay (NO)	Universal AC supply
RTP-LCD-B-N-C-01	Open Collector	Universal AC supply

* RTP unit with magnetic I/P is also available. Replace N by M in product code