



**BATCH CONTROLLERS / FLOW INDICATORS – Predefined / Universal type
MODEL 855 (Microprocessor based electronics)**

Technical Catalogue

Introduction

Pantech Instrument's Model 855V represents BATCH CONTROLLERS / FLOW INDICATORS AND TOTALIZERS for flow applications where single flow signal is available. Model 855 is an ideal instrument for controlling amount of material flow in every batch. The input signal can be a current/voltage/linear signal from a flow transmitter or pulses from turbine meters. It can also be UNIVERSAL input type, where user is allowed to select and configure the input signal. The analogue signal is square rooted if required, and similarly for digital pulses Litre/Pulses ratio (i.e. K factor) can be adjusted to achieve precise measurement of flow and hence batching.

The desired counts or the BATCH VALUE(S) are set through push button switches given in front of instrument. The relay(s) is/are energised to start the flow and batch counter starts. When set batch counts are reached, relay(s) get de energised as per the batch-relay settings and the flow is stopped. The cycle repeats when start button is pressed again. The flow can be interrupted during the working cycle by pressing stop button and again started by pressing start.

Optionally the instrument is

Serial communication outputs for computer system interfaces are also given optionally. The user is allowed to feed in : FLOW RANGE (for linear inputs), K FACTOR (for pulse input), COUNTS/Hr., FLOW TYPE and all other related parameters by front four keys only. All configurations, calibrations and output fine tunings etc. can be performed by front four keys only without opening the instrument. In the core of all the functions lies the latest and highly proven microprocessor based chipsets. The high end softwares ensure the most user friendly interactions by the user. The instrument incorporates low drift operational amplifiers and industrial grade components for long trouble free operation. Burn in of each module ensures long trouble free operations.

Model 855V at a glance :

- 1)Is to be used specifically for BATCHING purpose only. However the instrument also indicates instantaneous flow rate and totalizer in normal run.
- 2)Accepts a linear signal or pulse type signal. Can also work in UNIVERSAL input mode, where the user selects and configures the input type by front keys only.
- 3)Allows the user to set maximum 2 nos. of BATCH VALUES. Each batch value to activate 1/2/3/more relay(s).
- 4)BATCH VALUES can be set in values or percentages.
- 5)Batching process can be shown in INCREMENT or DECREMENT modes as selected by the user.
- 6)All the configurations calibrations etc to be done by front keys only.
- 7)All batching related functions to be done by front keys only.
- 8)Enclosures of all types – WP, FLP, IP-65 grade etc. available.

Pre-requisite from the USER:

- 1)What is the Input signal type if he chooses to go with PREDEFINED INPUT type model
- 2)What is the flow range with linear inputs. What is the K factor with Pulse inputs (configurable)
- 3)Flow type to be interpreted – Linear or square root (configurable)
- 4)Enclosure type / Safety standards etc.

Specifications

Input (any one type of below)

- Current – 4-20 mA / 0-20 mA DC
- Voltage – 0-10 V DC / 1-5 V DC
- Pulse (Open Collector type)
- UNIVERSAL (all of the above in one unit)
- * User needs to select any one of above
- * Other type on Factory Confirmation

Calculations possible for FLOW RATE

- Square root / Linear – for linear inputs
- K factor – for pulse inputs

Analog output

- 1)Isolated / Non Isolated 4 – 20 mA DC
- 2)Isolated / Non Isolated 0-10 V DC
- 3)Other types on factory confirmations

No. of Batch values possible

2 (Can be set in VALUE or %)

Contact output on Batch value

1/2/3/4/n

Serial output / MODEM CONNECTIVITY

- 1)RS232 With modbus RTU or ASCII protocol
- 2)RS485 with modbus RTU or ASCII protocol

Display

- 1) 4 digit red LED for Instant flow rate, 4 digit green LED for Engg. Unit display, 8 digit red LED for totalized value (LED size : 0.25") (Engg. Units selectable)
- 2) 4.5 digit red/green LED instant flow (LED size : 0.5") & 8 digit red LED totalized (LED size : 0.25")
- 3) 16*2 Alphanumeric display (Only for PULSE INPUT)

Accuracy

+/-0.1% of span

Transmitter Power

- 24 V DC @ 40 mA
- 12 V DC for pulse inputs
- Other types on factory confirmations

Power supply

- 1)24 V DC
- 2)110 V AC, 50 Hz, +/- 10%
- 3)230 V AC, 50 Hz, +/- 10%
- 4)90-270 V AC – SMPS type
- 5)Specials on factory confirmations

Backup

Zero power RAM provided backup for data

Power consumption

6 VA max.

Ambient temperature

0 – 50 C.

Storage temperature

0 – 70 C.

Humidity

90% RH (non-condensing)

Security

Single level – Password protected

Enclosures

Weatherproof, Flameproof and all other standard types

Mounting

Panel / Wall / Field

Dimensions

96*96 / 72*144 / 144*144 / **SPECIALS**
*All config/calibration from front keys only



Following table describes the availability of several models with the company right now. A general preview is only presented to the user. The dimensional and display sizes are the relational virtues of each other and hence the user is always requested to clarify the specifications of instrument with the factory prior to placement of the order. On confirmation with factory, changes of all types in all specifications is possible

Table with columns: Model, Mounting & Dimension in mm (H * W * D), Input, Power, Output option (Analog output, Contact output), Indication Options (Display resolution, Counter resolution), Display size. Row 855 includes Panel and Wall mounting options with various dimensions and specifications.

Ordering Information

Please confirm the availability of the model by cross checking the table mentioned on the backside.

Basic Model No. (Specified by first 3 digits)

855-Single input type
Batch Controller

Mounting & Encl. (Specified by letter following 3 digits)

P-Weatherproof - Panel
W-Weatherproof - Wall
F-Flameproof - Wall / field
I-IP65 grade - wall / field
S-Specials

Input (Specified by first digit following the letter)

1-Current inputs
2-Voltage inputs
3-Pulse inputs
U-Universal
S-Special input

Power option (Specified by the second digit)

1-24 V DC
2-110 V AC
3-230 V AC
4-90-270 V AC - SMPS type
S-Specials

Analog O/P Option (Specified by the fourth digit)

0-None
1-mA/V DC isolated
2-mA/V DC non-isolated
S-Specials

Contact output option (Specified by the fourth digit)

0-None
1-1NO + 1NC on batch
2-2NO + 2NC on batch
N-N (NO + NC)

Display Resolution (Specified by the sixth digit)

1-4.5 digit instant. Flow
8 digit totalizer
2-16*2 alphanumeric LCD
(for pulse inputs only)
** Please mention the color of displays clearly

Serial output (Specified by the fifth digit)

0-None
1-RS232 With modbus RTU
2-RS485 with modbus RTU
** Customized developments can be made if the quantity permits

