

JUMBO FLOW INDICATORS / CONTROLLERS – Single Flow signal input (Univ. type) MODEL 845W (Microprocessor based electronics)

Introduction

Alpha Engineering & Systems Model AES845W represents FLOW INDICATORS / TOTALIZERS / CONTROLLERS for flow applications where single flow signal is available. However the instrument allows the user to select this single input from an option list

of other linear inputs. Based on the flow application and the type of flow data signal, hence this model can be used in VOLUMETRIC and MASS flow measurements, both. The instrument accepts any predefined linear type of signal, and converts it into INSTANTANEOUS FLOW RATE to a resolution of 4/4.5 digits. TOTALIZED value is displayed through 8 digits red LED and this totalizer value is always protected against power failures through internal memory structures of microprocessor. Optionally the instrument is designed to give two contact relay outputs and a RETRANSMISSION ISOLATED signal on INSTANTANEOUS FLOW RATE. Serial communication outputs for computer system interfaces are also given optionally. The user is allowed to feed in : INPUT TYPE, FLOW RANGE, 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 AES845W :

- 1) Is to be used when a single flow signal input is there. Application can be a VOLUMETRIC / MASS type, depending upon the system design and type of flow transmitter signal output.
- 2) However the user in this model is allowed to select the input type from the list mentioned below.
- 3) User is allowed to feed in - FLOW RANGE for display, COUNTS/Hr., FLOW TYPE, FLOW RANGE again for RETRANSMISSION. For Pulse input, user has to feed in K factor.
- 4) In case the user wishes to calculate MASS FLOW with three inputs of : FLOW, PRESSURE, TEMP., then the user should look out for our model no. : 845G, 845N, 845S.

Specifications

Input (UNIVERSAL i.e all of below)

Current – 4-20 mA / 0-20 mA DC

Voltage – 0-10 V DC / 1-5 V DC

Pulse (Open Collector type)

* User needs to select any one of above

* Other type on Factory Confirmation

Calculations possible for FLOWRATE

Square root

Linear

* Both options configurable by front keys

Analog output

1) Isolated / Non Isolated 4 – 20 mA DC

2) Isolated / Non Isolated 0-10 V DC

3) Other types on factory confirmations

4-20 mA DC o/p load @ 800 ohms

Contact output

Maximum 2 sets of C,NC,NO on FLOW RATE

Serial output / MODEM CONNECTIVITY

1) RS232 With modbus RTU or ASCII protocol

2) RS485 with modbus RTU or ASCII protocol

3) Modem connectivity with central software

4) GSM (Mobile) connectivity

Display

1) 5 digit red LED for Instant flow rate,

8 digit red LED for totalized value

Display Size (any one type)

1) 2", 4", 6", 8"

Accuracy

+/- 0.1% of span

Transmitter Power

24 V DC @ 40 mA

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

Wall / Field



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)
845W-Single input type Flow Indicator Totalizers

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

- W-Weatherproof - Wall
- I-IP65 grade – wall / field
- S-Specials

Input (Specified by first digit following the letter)
1-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 flow
2-2NO + 2NC on flow

Display Size for Flow Rate (Specified by the fifth digit)

- 0-2"
- 1-4"
- 2-6"
- 3-8"

** Customized developments can be made if the quantity permits

Display Size for Totalizer (Specified by the sixth digit)

- 1-2"
- 2-4"
- 3-6"
- 4-8"

Serial output (Specified by the fifth digit)

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

