

## GENERAL

**ALIASONIC** AUF790NT Series is a fixed mounted, Open Channel ultrasonic flowmeter, with clamp-on transducer used for non-invasive measurement. Our microprocessor based, user friendly, field programmable flow measurement technique allows no interruption of the process flow and has low installation costs.

## FEATURES

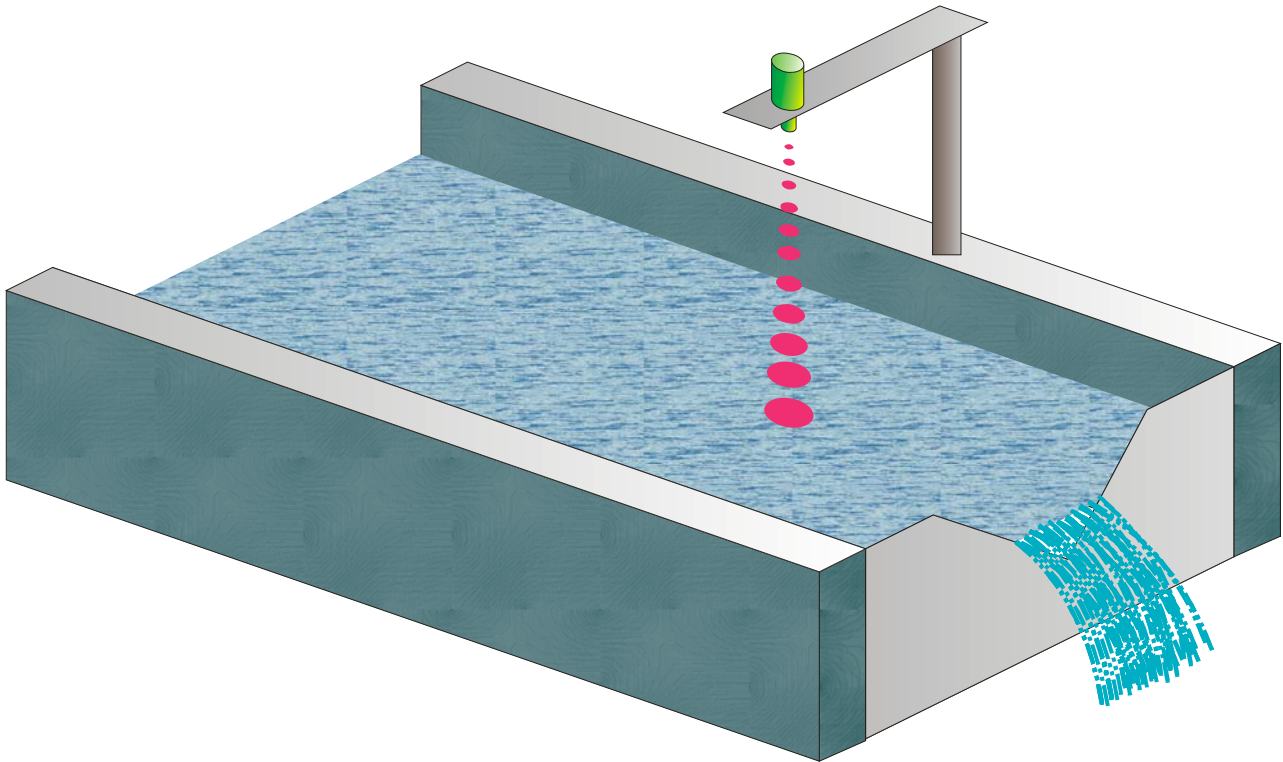
- ❑ 4 line LCD display with flowrate, totalizer & Level condition
- ❑ V-notch, rectangular with and without end contractions, Cipolletti.
- ❑ Parshall, Palmer-Bowlus, Leopold-Lagco, trapezoidal, H.
- ❑ A sampler relay will signal your sampler to collect flow proportion
- ❑ High accuracy of  $\pm 0.8\%$  of reading
- ❑ Non-contact flow measurement
- ❑ Exclusive sensor for open channel flow
- ❑ Response time less than 1 second

## STANDARD SPECIFICATION

- |                       |                                                                                                                                                                                                                                                                                                                     |                       |                                                                                                |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------|
| ● Measuring Principle | : Ultrasonic Sound                                                                                                                                                                                                                                                                                                  | ● Low Level Cutoff    | : 0.005 ~ 0.2 Meter                                                                            |
| ● Measuring Range     | :<br>Level : 0-3 Meter<br>Flow Rate : 0-10,000 m <sup>3</sup> /Min                                                                                                                                                                                                                                                  | ● Dead Band           | : 0.25 - 0.5 Meter                                                                             |
| ● Accuracy            | : $\pm 0.2\%$ of Full Scale                                                                                                                                                                                                                                                                                         | ● Beam Angle          | : 6 °                                                                                          |
| ● Repeatability       | : $\pm 0.1\%$ of reading                                                                                                                                                                                                                                                                                            | ● Keypad              | : 4 Key with tactile action                                                                    |
| ● Material            | :<br>Ultrasonic Tube : ABS<br>Sensor Head : Polyurethane<br>Housing : ABS (Separate Version)<br>: Low copper cast aluminum alloy with<br>polyurethane ( Compact Version)                                                                                                                                            | ● Response Time       | : Less than 1 second                                                                           |
| ● Display             | : 4 Line LCD with illumination (Separate Version)<br>: 2 Line LCD with illumination (Compact Version)<br>Flowrate : 5 digits with decimal point<br>Totalizer : 8 digits<br>Level : 4 digits<br>Flow Engineer Unit : M <sup>3</sup> , Liter<br>Level : Meter<br>Time Unit : Second, Hour<br>Other : Signal condition | ● Ambient Temperature | : -20 ~ +60 °C                                                                                 |
| ● Formula             | : V-notch, Parshall, Palmer-Bowlus<br>: rectangular, Cipolletti, Leopold-Lagco                                                                                                                                                                                                                                      | ● Mounting            | : G2"                                                                                          |
| ● Sensor Frequency    | : 40KHz / 1KHz                                                                                                                                                                                                                                                                                                      | ● Max. Cable Length   | : 50 M                                                                                         |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Power Consumption   | : Less than 3W                                                                                 |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Power Supply        | : 90 ~ 260Vac, 50/60 Hz or 15-36Vdc                                                            |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Data Storage        | : Operation parameters and totalization<br>date are stored by EEPROM for more<br>than 10 years |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Output              | : 4-20 mA                                                                                      |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Pulse Output        | : 1- 9999 Hz (Separate Only)                                                                   |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Alarm               | : High/Low                                                                                     |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Communication       | : RS-485 (modbus)                                                                              |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Dimensions          | : Compact 125mm(W)*230mm(H)*170mm(D)<br>: Separate 240mm(W)*210mm(H)*120mm(D)                  |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Weight              | : 3.5 Kg(compact), 2.2 Kg(Separate)                                                            |
|                       |                                                                                                                                                                                                                                                                                                                     | ● Enclosure           | : IP65<br>: Explosion Proof, EX d (ia) II B T4                                                 |



## INSTALLATION



## MODEL SELECTION GUIDE

| AUF790NT Series                 |     |         |    |     |                                                   |
|---------------------------------|-----|---------|----|-----|---------------------------------------------------|
| Example 1: AUF790NT-AC-NN-10-NN |     |         |    |     |                                                   |
| AUF790NT-                       | XX- | XX-     | XX | -XX | Description                                       |
| Power Supply                    | AC- |         |    |     | 90-260VAC                                         |
|                                 | DC- |         |    |     | 15 - 36 VDC                                       |
| Alarm                           |     | NN-     |    |     | without Alarm Output                              |
|                                 |     | A1-     |    |     | With One Alarm Output                             |
|                                 |     | A2-     |    |     | With Two Alarm Outputs                            |
|                                 |     | A3-     |    |     | With Three Alarm Outputs                          |
|                                 |     | A4-     |    |     | With Four Alarm Outputs                           |
| Installation & Cable Length     |     | NN      |    |     | Compact Version                                   |
|                                 |     | 10 ~ 50 |    |     | Separate Version, Cable 10 M ~ 50 M               |
| Option                          |     |         |    | -NN | None                                              |
|                                 |     |         |    | -EX | Explosion Proof, EX d (ia) II B T4 (Compact Only) |
|                                 |     |         |    | -PO | Scale Pulse Output (Separate Only)                |