

Ultrasonic Flowmeter Application Report 26

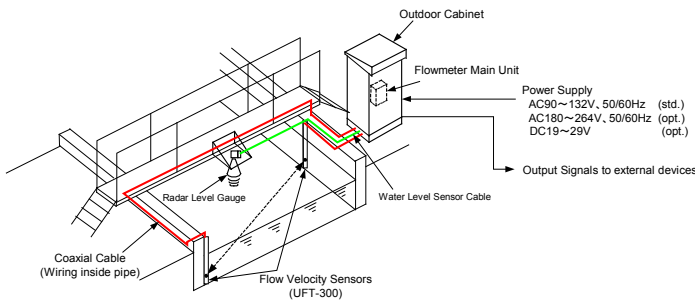
- Underground Open Channel -



The UF960 series stationary, clamp-on ultrasonic flowmeter with multi-path measurement capability incorporating up to 2 pairs of transducers placed inside channel provides stable instantaneous flow rate measurements.

At this particular site, the UF-960 series stationary flowmeter is installed as combined with multiple pairs of sensors and roof-mounted level gauge. It can measure the flow rate through more than 1500mm channel with least interference of flow.

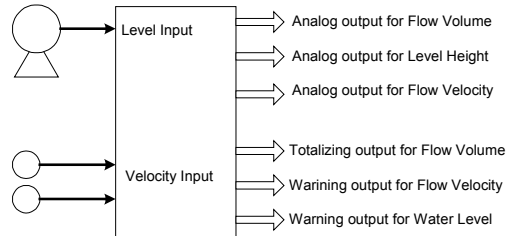
Typical configuration is described as below system.



1 pair of ultrasonic transducer measures flow-velocity by time-transit principle. 1 set of level gauge measures height of fluid surface. Then actual cross-section is calculated from predefined channel dimension and fluid height. Flow volume will be led as multiplied by velocity and fluid height. When water-level goes down to velocity transducer height, then automatically UF-960 will switch to HQ calculation mode. Because of measuring actual flow velocity, UF-960 can measure 0-flow during even pooled water situation. Multi-path measurement is a feature of our UF-960 series stationary open channel ultrasonic flowmeter. By employing the UF-960 series stationary open channel ultrasonic flowmeter in combination with the appropriate sensor from the variety available and/or the system's multi-path

measurement capability. You may be able to obtain high stable flow measurements of channel from 0.3m up to 15m in rectangular channel, circular channel up to 10m.

In addition, the all-in-one UF-960 main unit boasts 3 independent analog outputs each for flow rate, velocity and level. Also it has 3 contact outputs each for flow totalizing, velocity warning and level warning.



[Channel Specification]

Size : 1500mm

[Installation Data]

Main Unit : Stationary Open Channel Ultrasonic Flowmeter UF-960
Transducer : SE040040 (WL-04)
Installation : Direct path method / 2 path

For more detailed information, please contact your local representative.

Representative in your Area