Ultrasonic Flowmeter Application Report 44

- Battery-driven wireless communication system -

The "Intelligent digital UFW-100" stationary, clamp-on ultrasonic flowmeter with transducers placed onto the outside of pipes provides stable instantaneous flow rate measurements.

At this particular site, the UFW-100 stationary flowmeter measures the flow rate of water inside plant through a 600mm diameter pipe, non-intrusively, from the outside with no interference of flow. The sensors are clamped with integrated mounting fixture by stainless steel band.

Also this remote region, no electricity power for any of device. Hence combination of Solar charging and battery drive system keep activating this flowmeter. Besides, periodically measurement data will be sent through mobile phone network. Even transmission error happens internal logging function can retain more than 1-month data inside, you can pull it out in any time.

To verify whether the installation is OK or not, UFW-100's Windows-based graphical & user-friendly PC interface "UFW_config" can show certainty of echo reflections with echo shape and its strength.

In addition, by employing the UFW-100 stationary clamp-on ultrasonic flowmeter in combination with the easy set-up

function on above software is easy to configure through such as "Wizard-parameter input", "Auto-Logging function", "Analog input" and / or "Integrated mounting fixture". Through such easy setup function, you may be able to obtain high accuracy flow measurements of pipes from 25mm up to 600mm in nominal diameter with a ±30m/s velocity range coverage.
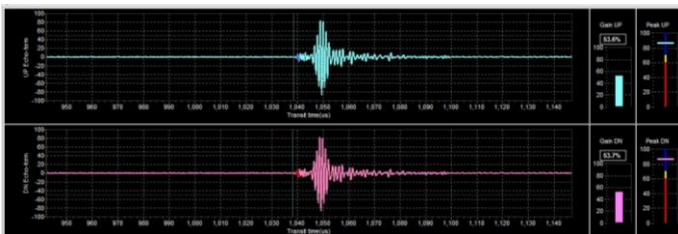
The all-in-one UFW-100 main unit boasts 1 Analog output, 1 Contact output for totalizing or warning, 1 Digital communication port RS-232C as standard, another port for RS-485 (Option) and Analog input (Option).

[Pipe Specification]
Diameter   :   DN600mm
Pipe material   :   Carbon Steel
Lining   :   Epoxy
Thickness   9.5mm
[Installation Data]
Main Unit   :   Stationary Ultrasonic Flowmeter UFW-100
Transducer   :   SE104720T
Installation   :   V method / 1 path

For more detailed information, please contact your local representative.

Representative in your Area