

Application Note

Doppler works on river water... this time

Doppler needs bubbles or solids to reflect its signal

We are trying to get in the habit of bringing a PORTAFLOW Transit Time Flowmeter when we get a call to demonstrate Doppler, and to bring a PDFM-IV Doppler meter when we get a call to demonstrate Transit Time.

Sounds contrary, but time and time again we see the need for both types of flowmeter.

These tests were done at the Alexandria Water Treatment Plant. They called asking for a clean water flowmeter so of course we expected the PORTAFLOW to be the best choice. But in this case the PDFM-IV signal strength was high in every location. The water source is a nearby river and pressure was low (10 psi), so there was lots of bubbles to reflect the Doppler signal.

The sensor location was not good (just after a venturi) but the plant operator was quite satisfied with the PDFM-IV readings on this 10" steel pipe. Flow rate ranged from 500 to 1600 IGPM (2.45 to 7.84 ft/sec or 0.75 to 2.4 m/sec velocity)

Sales Tip: if you want to make a lasting impression when you demonstrate the PDFM-IV, record a sample of the flow with the built-in data logger and send them an image of the log file with your quotation. It underlines the power and simplicity of the PDFM-IV.

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