



Ask the Expert

A discussion on the Ultra 4.

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Job Title: **Service & Technical Support Manager**

Experience: **21 years**



What is your favorite part of your job?

Interacting with people and teaching people how stuff works, working with new technologies, and learning stuff. The most important thing for me is that we actually make stuff, we have a hand in how the product is made and we have input as to what goes into the product.

What is your favorite Pulsar Measurement product and why?

I like Ultra 4. Because it's fresh, we've spent a long time testing it and it's nice to use. With the display, it's a bit more graphical, intuitive, and interactive. It's the best product we've got (my favorite anyway!).

I do also like the legacy Greyline products, as they are easy to use and intuitive too. I enjoyed learning about them and showing them to customers when we do tests on site.

Any funny installation stories you'd like to share?

We went to commission a flume before, and found the flume was installed the wrong way round! All the big civil engineering work had been done to install this flume and they did it back to front!

The Ultra 4 is a new product to Pulsar Measurement. What makes this product so exciting?

It's compact and easy to use, we've got comms options including Modbus, Profibus, and HART on the way! We've got onboard data logging with the onboard SD card; the data logging includes the diagnostic traces so if there are any tricky applications we can recall on those logs.

It allows us to support the product remotely and fix any intermittent issues in a timely manner.

I like the display and the menu structure, it's quite nice to use.

It packs a lot of different features and functions into a small package.

What are the benefits customers get with the Ultra 4 that they don't get with other products?

Well, it's a Pulsar product, so obviously, customers get superb support and service. It's all-in-one because we do flow, level, volume, and pump control from one unit!

They get logging capabilities straight to an SD card without needing any special software to extract data and the ability to save parameters and clone units using the SD card.

The diagnostic trace is on the screen, so you don't need specific software to look at that either, you can just look at it on the screen and get a good indication of how things are.

We also have a solid-state relay, which means there are no mechanical contacts – meaning we can provide a pulsed output. We provide one every cubic meter that's gone through in flow. Traditionally this was always done with an electromechanical relay and these are sometimes subject to contact wear and also contact bounce.

What does the MCERTS Certificate mean?

It means we can now deploy it into applications that require an MCERT's flow standard. It means that our equipment has passed rigorous, real-world tests in different environmental and electrical conditions. Giving us and end-users confidence in the accuracy and validity of the measurement.

It's taken on board by companies/countries that don't have the MCERT stamp, but they are aware of what it means. It's a sign that the product has been tested externally to a high standard and the system has achieved a high standard in these tests.

What do you think the future of the Ultra 4 is in the Water Industry?

It's going to be good for flow installations and small pumping stations, because these are the general applications it has been designed for.

I think with the connectivity options that are available they can be integrated with a number of new telemetry devices that employ communication standards or trends that various water authorities/services may use. When looking at the global water industry, many authorities/services use different methods of extracting data, the Ultra 4 offers the flexibility to be compatible with many different methods.

With the EDM stuff going on and the requirement for more level and monitoring stuff happening, water companies might be looking for a certified product to provide confidence and validity in their readings. The onboard logging capability and

connectivity options might make the Ultra 4 a more attractive option. Our long-standing history in the water industry makes us a trusted provider!

What are the other capabilities of the Ultra 4 besides Flow Measurement?

Pump control, volume measurement, level measurement.

The event logging is useful to see when alarms are raised and cleared. Its main other use would be for inventory management. Measuring the level of material in a tank to ensure efficient stock control. It is more of an evolution of the Ultra products that came before it.

We've used it in food factories with Modbus and the UltraScan software.

I've been to a site before where there were two Ultra 4 units using Modbus and UltraScan software, allowing the reading to be viewed back inside the control room on a computer.

More Information

Ultra 4: <https://pulsarmeasurement.com/ultra4.html>



Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of global partners all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia, allows us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

www.pulsarmeasurement.com



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