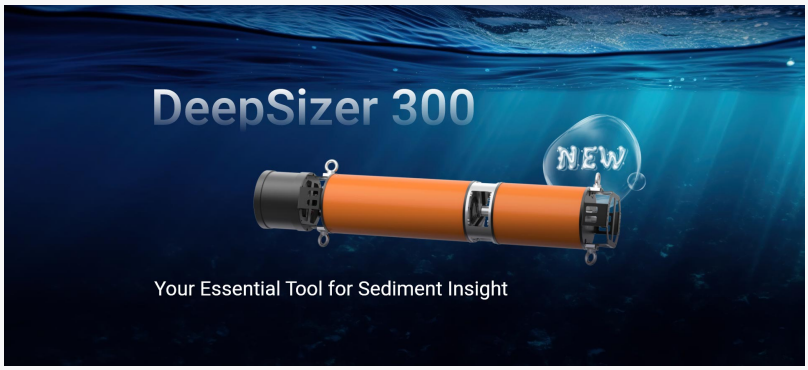
Bettersize Celebrates 20th World Rivers Day with the Launch of DeepSizer 300, Bringing Rivers' Hidden Stories to Light

Bettersize launches DeepSizer 300 for measuring suspended sediment concentration and particle size in real-time river sediment monitoring.



DeepSizer 300

COSTA MESA, CA, UNITED STATES, September 28, 2025 / EINPresswire.com/ -- On the 20th World Rivers Day, Bettersize Instruments proudly announces the release of DeepSizer 300, a groundbreaking submersible laser particle size analyzer designed to address critical challenges in river health monitoring. This year's theme, 'Waterways in our Communities,' underscores the urgent need to protect healthy rivers and restore degraded ones—a mission where precise, real-time sediment data is paramount.

> Sediment tells rivers' true story. DeepSizer 300 delivers real-time data to protect ecosystems and communities from pollution and floods."
>
> *Zhicao Han*

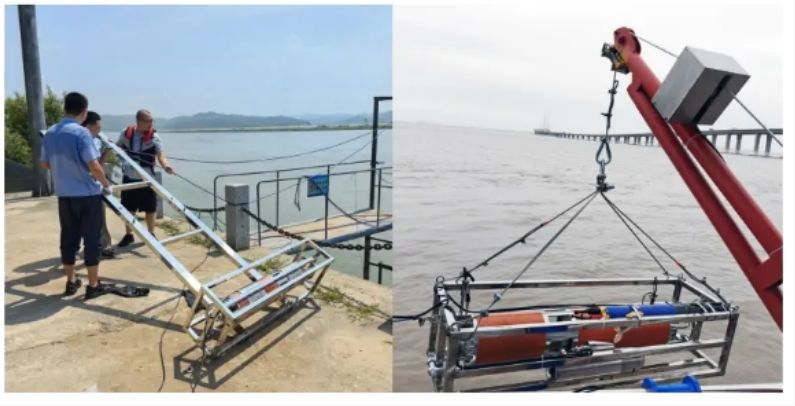
Learn more

Rivers worldwide are under increasing pressure from pollution, climate change, and industrial development. A key indicator of river health and a major factor in environmental risks is suspended sediment. Sediment transport influences river morphology, reservoir capacity, flood risks, and ecosystem health. Traditional methods for measuring Suspended Sediment Concentration (SSC) and Particle Size Distribution (PSD) are labor-intensive, slow, and fail to capture the short-lived, high-intensity sediment surges that occur during floods or storms.

A New Leap: The DeepSizer 300

The DeepSizer 300 represents a significant leap forward in sediment monitoring technology. It enables long-term, in-situ measurement of both SSC (0.001–100 g/L) and PSD (0.1–2000 μm) in real-time, without the need for manual sampling. Its operation is powered by six core

technologies, including patented Differential Path and Adaptive Path Technologies, which ensure accuracy across a wide range of conditions, from clear waters to extreme turbidity exceeding 20 g/L.



Proven in the Field

Key advantages for river monitoring include:
- Real-Time Event Capture: Provides continuous data at intervals as short as every six seconds (depending on the operational mode), capturing sudden sediment peaks that discrete sampling misses, essential for flood early-warning systems.
- No More Delays: In-situ testing eliminates manual sampling errors and lab delays, delivering continuous data directly from the source.
- Sees Through the Chaos: Accurate readings from clear waters to flood-level turbidity (0.001-100 g/L).
- Robust Field Deployment: Features such as automatic optical window cleaning, self-balancing hydraulic pressure (for depths up to 200 m), and flexible data transmission (wired, 4G wireless, offline) ensure reliable operation even during extreme floods with minimal maintenance.

Proven in the Field
The capabilities of the DeepSizer 300 have already been demonstrated hydrological stations and marine monitoring sites. In 2025, it was successfully deployed on the Yalu River at the Dandong Huanggou Hydrological Station, where the instrument successfully tracked multiple sediment concentration peaks exceeding 20 g/L, with maxima near 35 g/L, while simultaneously recording changes in particle size, providing invaluable data and early flood warnings during heavy rainfall. In another case, at the Chongming Marine Station, it delivered data crucial for forecasting tidal movements and understanding coastal sediment dynamics.

Key features of the DeepSizer 300 include:
- Real-time monitoring of sediment concentration and particle size distribution, enabling early warning during floods and typhoons.
- High accuracy in extreme turbidity, thanks to advanced multiple scattering correction.
- Adaptive path technology automatically adjust the optical path length for varying sediment concentration levels, thereby ensuring measurement accuracy.
- Differential path technology subtracts short-path signals from long-path signals to isolate pure sediment scattering and eliminate noise and contamination effects to deliver precise particle size and concentration data without background interference.
- Long-term unattended deployment with automatic optical window cleaning and intelligent background correction.
- Versatile transmission modes (wired, wireless, offline) for integration into diverse research and

monitoring environments.

On this World Rivers Day, as millions of people across 100 countries celebrate and advocate for our vital waterways, Bettersize Instruments is committed to providing the advanced tools necessary to protect these precious resources for future generations.

About Bettersize Instruments
Bettersize Instruments is a leading provider of particle size and shape analysis solutions. With a commitment to innovation and quality, Bettersize develops advanced instruments that serve a wide range of industries and research fields, from pharmaceuticals and mining to environmental science and academia.

About World Rivers Day
World Rivers Day is celebrated on the fourth Sunday of September each year. Founded by Canadian conservationist Mark Angelo, it has grown into one of the largest environmental celebrations on the planet, involving millions of people in over 100 countries. The day is dedicated to highlighting the immense value of our rivers and encouraging active stewardship to ensure their long-term health.

For more information on the DeepSizer 300, visit:
https://www.bettersizeinstruments.com/products/deepsizer-300-submersible-particle-size-analyzer/

Ricky Ponting
Bettersize Inc.
+1 833-699-7493
info@bettersize.com
Visit us on social media:
LinkedIn
YouTube
X
