

River Bed Sedimentation Meter



- Continuous measurement of river bed fluctuation (scouring, sedimentation)
- Measurement data is recorded in the control unit.
- Low electric power consumption with solar cell operation capability.



The river bed sedimentation meter is a sensor capable of continuous measurement of the river bed fluctuation, by measuring the river bed surface and water level based on the river bed deposition materials and river water conductivity.

Measurement data is output as the dedicated signal, and recorded in the control unit.

Specifications

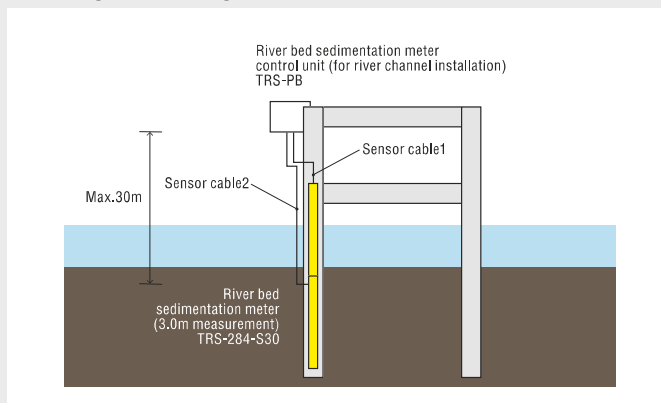
River bed sedimentation meter

Model	TRS-284-S30
Configuration	A pair of two units (upper and lower unit)
Measuring method	Conductivity measuring method
Measuring range	0 - 3m
Measurement accuracy	River bed surface positional accuracy: $\pm 2\text{cm}$, Water surface positional accuracy: $\pm 2\text{cm}$ *At least 4cm from the lower unit
Output signal	Signal dedicated to the sensor
Output	River bed surface location, water surface location
Power supply	DC3.1 to 3.8V(supplied by the control unit)
Operating condition (temperature)	-10°C to 60°C (No freezing)
Material	Sensor electrode: SUS304 Case: PC + ABS resin
Dimensions	86W×3156H×30D mm(excluding protruding parts)
Weight	$\leq 7.5\text{kg}$ (upper/lower single unit)
Cable	Sheath material: Polyurethane Outer diameter: approx. $\phi 6\text{mm}$ (Finishing outer diameter) Length: upper specified length -1.6m, lower specified length (Maximum 30m)

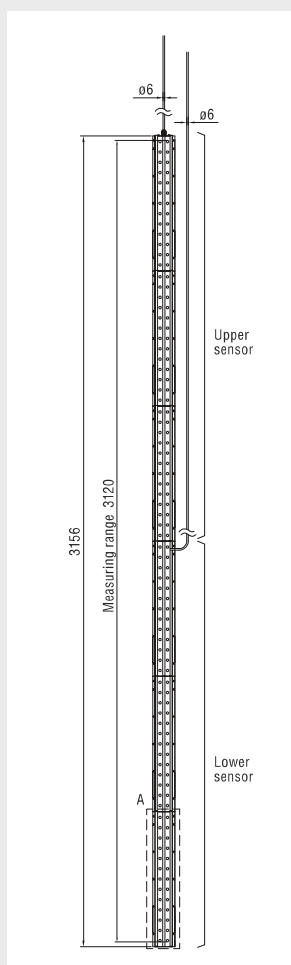
River bed sedimentation meter control unit

Model	TRS-PB
Input	RS-485 signal River bed sedimentation meter sensor 2 sensor output
Serial output	Micro USB type-B connector 1 sensor output (for PC communication)
Display・Operation	LCD display (16 characters x 2 lines), operation with the front panel key (6 keys)
Recording media	micro-SD card (2 GB or less)
Recording interval	1 minute, 3 minutes, 5 minutes, or 10 minutes
Power supply	DC6.6 to 19.6V
Solar cell	Maximum nominal power: 1.74W, Maximum nominal working voltage: 10.0V
Battery	Nominal voltage: DC7.2V, nominal capacity: 4Ah Guaranteed battery hour: approx. 10 days (at 10-minute recording interval)
Operating condition (temperature)	-10°C to 50°C (No freezing)
Material	Cap: polycarbonate Mounting base: POM, mounting bracket: SUS304
Dimensions	$\phi 267 \times 226\text{ mm}$ (excluding protruding parts)
Weight	$\leq 10\text{kg}$

Configuration diagram



River bed sedimentation meter



River bed sedimentation meter control unit

