

## Digital Handheld Water Velocity Meters

Global Water's FP111, FP211, and FP311 Flow Probes are highly accurate water velocity instruments for measuring flows in open channels and partially filled pipes. The water velocity probe consists of a protected water turbo prop positive displacement sensor coupled with an expandable probe handle ending in a digital readout display. The water flow meter incorporates true velocity averaging for the most accurate flow measurements.

Each flow probe has the unique Turbo-Prop propeller sensor, which uses the most accurate positive displacement technique available for velocity sensing. The Turbo-Prop is designed to shed debris and is protected inside a two-inch diameter housing. The probe housing may be placed directly on the bottom of a pipe or streambed for measuring low flows down to two inches in depth. The flow meter propeller rotates freely on its bearing shaft with no mechanical interconnections for minimal friction.

The water velocity computer receives an electrical signal from the propeller, amplifies the signal, and converts the reading to feet or meters per second. The large LCD screen displays average, minimum, and maximum water velocity readings. The water velocity computer has a water-resistant housing and incorporates a unique four-button operation for changing functions and resetting the display. The water velocity computer is powered by a non-replaceable battery that will last approximately five years with normal use.

The Flow Probe handle can telescope from 3.7 feet to 6 feet in length (FP111), 5.5 feet to 14 feet (FP211), or 2.5 feet to 5.5 feet (FP311). The handle is constructed of anodized aluminum for light weight and long life. All three meters have a Swivel Head option that allows you to rotate the flow probe's turbo prop to  $\pm 90$  degrees from it's standard position. This option lets the flow probe take water velocity measurements in hard to measure areas.

The Global Water Flow Probe Alignment Fin is designed to help orient the flow probe parallel to flow when the end of the probe can't be seen well due to the depth or cloudiness of the water. This significantly reduces the chance for error that can occur when measuring water flow other than directly parallel to the direction of flow.



Stormwater   Surface water   Wastewater



- Records 30 data sets
- Rain-proof digital computer
- Highly accurate easy flow monitoring
- Lightweight, rugged, and reliable
- Telescoping handle with staff gauge
- Padded carrying case for easy storage
- CE Certified
- Used by water professionals worldwide since 1990



Flow probe prop housing with optional alignment fin



Flow probe digital readout display

## Specifications

<b>Velocity Meter</b>	
<b>Range</b>	0.3-19.9 FPS (0.1-6.1 MPS)
<b>Accuracy</b>	0.1 FPS
<b>Averaging</b>	True digital running average. Updated once per second.
<b>Display</b>	LCD, Glare, and UV Protected
<b>Control</b>	4 button
<b>Datalogger</b>	30 sets, MIN, MAX, and AVG
<b>Features</b>	Timer, Low battery warning
<b>Sensor Type</b>	Protected Turbo-Prop propeller with magnetic pickup.
<b>Weight</b>	Instrument: 2 lbs (0.9 kg) (FP111); 3 lbs (1.4 kg) (FP211); 2.8 lbs (1.3 kg) (FP311) Shipping: 13 lbs (5.9 kg) (FP111); 23 lbs (10.4 kg) (FP211); 19 lbs (8.6 kg) (FP311)
<b>Expendable Length</b>	3.7 to 6 ft (1.1 to 1.8 m) (FP111); 5.5 to 14 ft (1.7 to 4.3 m) (FP211); 2.5 to 5.5 ft (0.76 to 1.7 m) (FP311)
<b>Materials</b>	Probe: PVC and anodized aluminum with stainless steel water bearing Computer: ABS/Polycarbonate housing with polyester overlay
<b>Power</b>	Internal Lithium Battery, Approx 5 years life with typical use, Non-Replaceable
<b>Auto Shutoff</b>	After 5 minutes of inactivity
<b>Operating Temperature</b>	-4 °F to 158 °F (-20 °C to 70 °C)
<b>Storage Temperature</b>	-22 °F to 176 °F (-30 °C to 80 °C)
<b>Carrying Case</b>	The Flow Probe is shipped in a padded carrying case.
<b>Certificates</b>	CE

