

FT12-T900D

Foldable Trimaran Vessel &

Wireless Data Radio Modem



Overview

FT12-T900D is a foldable unpowered trimaran survey float system, consisting of FT12 foldable trimaran and T900D integrated wireless data radio modem. Equipped with ADCP, it measures flow velocity and discharge in streams, rivers, lakes and coastal waters.

The foldable-portable hull accesses waters unreachable for ordinary vessels, shortening field operation time and protecting operators, with GPS positioning and data processing supported. The matched T900D radio works on reliable 900 MHz frequency band. Ship- side unit integrates battery, battery- level indicator and power switch for quick deployment without complicated wiring. It features waterproof construction, visible battery & signal status. The shore- side unit adopts USB power supply for low- cost maintenance. High-precision positioning and attitude devices such as GPS and compass are optional for upgrade.

Technical Specifications

FT12 Foldable Trimaran Vessel	
Structure	Foldable trimaran with handles for easy carry & transport
Hull Material	High-density lightweight high-strength polyethylene
Mounting Bracket	Anodized aluminum alloy
Assembled Dimension	L:1200 mm W:860 mm H:200 mm
Weight	8 kg (hull only); 17 kg (with instrument & battery)
Max Tolerable Flow Velocity	5 m/s
Hull Design	Streamlined low-resistance hull; fin-shaped tail fin; mounting compatible with various ADCP models
Waterproof Structure	Tight waterproof construction for ADCP cable gland, radio antenna and hatch cover to protect internal equipment
Hardware	Safety rope: stainless-steel wire; Fasteners: stainless steel
Radio Frequency	900 MHz or 2.4 GHz
Optional Features	GPS Positioning; Acoustic Measurement Module; Li-ion Battery Pack & Charger; Multi-channel Communication System; Other External Sensors

T900D Wireless Data Radio Modem	
Material	Alloy
Weigh	Ship-side: <0.5 kg; Shore-side: <0.1 kg
Design	Integrated design. Ship-side built-in rechargeable Li-ion battery, no external power required, capable of powering ADCP host unit
Shore-side Dimension	<63 × 50 × 17 mm
Indicator LED	Ship-side: battery-level LED; Shore-side: signal-strength LED
Frequency Range	902-928 MHz
Transmission Mode	Frequency Hopping
Error Detection	32-bit CRC, ARQ
Transmit Power	1 W (30 dBm)
Operation Mode	Point-to-Point
Power Consumption	Sleep: <1 mA; Idle: 20 mA; RX: 45-98 mA; TX: 1000-1400 mA
Transmission Range	>2 km
Antenna	Flexible antenna / Foldable antenna
Interface	Type-C (Power & Data)
Operating Temperature	-40°C ~ +85°C
Operating Humidity	0-95%RH, non-condensing
Battery Endurance	Continuous operation ≥10 hours
Compatibility	Data transmission for ADCP, GPS, position-orientation unit and other devices
Certification	FCC / IC