

# Mobile Towing System

FLOW MEASUREMENT | DISCHARGE MEASUREMENT

## General Description

The Flying Fox is a **portable towing and positioning system with built-in electric motor and remote control**. It moves remote-controlled over a span of rope transversely to the flow axis and pulls a measuring device - e.g. an ADCP boat - for cross-section measurement through the river, and positions the device exactly at the measuring point.

No need for a fixed cable crane: The **system is mobile** thanks to the low weight of the vehicle and the control system and the use of a synthetic rope rather than a wire: Simply span the rope over the desired river section, hang on the vehicle and control the ride over the water by remote control. No construction or earthwork is required.

The **particularly large climbing angle of up to 45 degrees** facilitates the set-up even at points where, for example, there is a height difference between the right and the left riverbank. A safety lock prevents the tow vehicle from separating from the rope.

The Flying Fox is controlled via a **robust weatherproof remote control** with backlit LC display. The LCD shows transect speed, position as distance from the starting point on the rope, wireless signal strength, voltage and current draw while operating, battery voltage, and low battery alarm (visual and acoustic).

## Applications

- Hydrology
- Hydrometry
- Consulting Engineering
- Infrastructure-independent Measurements
- Mobile Measurements

## Features

- Towing & positioning
- Mobile operation
- Remote control from river bank
- Lightweight, portable device
- Rugged construction
- Wireless operation
- Variable speed control
- Rechargeable & exchangeable batteries
- Loss protection
- Rugged weatherproof instrument case



## Technical Specifications

|                          |   |
|--------------------------|---|
| <b>Transect speed</b>    | User selectable from 0 to 0.5 m/sec (0.1 to 1.6 ft/sec)   |
| <b>Transmitter range</b> | Up to 175 m (574 ft)  |
| <b>Frequency band</b>    | License-free, ISM band for short-range devices (Australia, Europe, USA)   |
| <b>Power Supply</b>      | <ul style="list-style-type: none"> <li>■ Tow vehicle battery: 12V:2.8Ah SLA battery</li> <li>■ Remote control battery: 3 x NiMH AA batteries</li> <li>■ Main charger: 220 VAC or (110 VAC)</li> <li>■ Cigarette lighter battery charger</li> </ul>  |
| <b>Enclosure</b>         | Powder coated aluminum, ABS   |
| <b>Operating time</b>    | <ul style="list-style-type: none"> <li>■ A fully charged battery will drive the Flying Fox for approx. 600 m (1968 ft) total traversing distance at any speed setting. (Please note: This is not the radio range.)</li> <li>■ For example: A 100 m span can be traversed 6 times, i.e. 20 minutes continuous at 0.5 m/s (1.6 ft/s) or 50 minutes continuous at 0.2 m/s (0.6 ft/s).</li> </ul>     |
| <b>Rope</b>              | <ul style="list-style-type: none"> <li>■ Any low stretch, high strength 8 mm (5/16") diameter rope</li> <li>■ Optionally available, see below</li> </ul>  |
| <b>Dimensions</b>        | L x W x D: 370 x 340 x 190 mm   |
| <b>Weight</b>            | <ul style="list-style-type: none"> <li>■ Tow vehicle weight: 5 kg (10.5 lbs)</li> <li>■ Shipping weight with case: 10 kg (22.5 lbs)</li> </ul>  |
| <b>Compliance</b>        | CE, FCC, RoHS   |
| <b>Scope of delivery</b> | <ul style="list-style-type: none"> <li>■ Flying Fox carriage</li> <li>■ Remote control</li> <li>■ Power supply/charger (100-240 VAC/50/60 Hz)</li> <li>■ IC regulated DC/DC converter (with car cigarette lighter plug)</li> <li>■ 2 fixing pins (with safety locking pins)</li> <li>■ Optional: synthetic cable</li> <li>■ Not included: measuring instruments, ADCP boats, batteries</li> </ul> |

## Accessories & Alternative Model



**Rope:** Low stretch, high strength 8 mm (5/16") diameter Spectra rope, length: 100 or 200 m



**Cable Fox CFX** (alternative model for existing cable ways): The Cable Fox is a portable self-driven, remotely controlled towing and positioning system for use on existing

cable ways (cable diameters 10-14 and 16-32 mm). The Cable Fox is suitable for towing and positioning of ADCP boats (not included).

Reseller

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