



- Number of samples: Single event sampler.
- 30 Ahr high capacity battery pack.

Deployment:

- Specially designed cable clamps facilitate fast and easy attachment to an oceanographic wire for deployment.
- Non-volatile memory stores critical deployment data.

Options:

- Deep model available with 7,000 m rated housing.
- Standard radial filter holder or vertical intake filter holder (as used in GEOTRACES studies).
- Filter holder types include: multiple tiers, and zooplankton style (for filter holder option details see [WTS-LV Filter Holder Specifications chart](#)).
- For more information about this sampler, see the [WTS-LV](#) pages at mclanelabs.com.

WTS-LV - High Capacity Model

Application:

The Upright Large Volume Water Transfer System (WTS-LVUP) is a large volume, high capacity single-event sampler that collects suspended and dissolved particulate samples *in situ*. Ambient water is drawn through a modular filter holder onto a 142mm membrane without passing through the pump. Standard 2-tier filter holder for prefiltering and size fractioning. Other options are available. Collection targets include chlorophyll maximum, particulate trace metals, and phytoplankton.

Features:

Different flow rates and filter porosity support a range of specimen collection. (pump head must be compatible with filter material, see [WTS-LV Filter Types and Recommended Pump Heads chart](#)).

Flow is regulated by user-defined values for total volume, flow rate, and sample collection time.

Sampling can be programmed to start at a scheduled time or begin with a countdown delay. Triggered countdown start synchronizes multiple samplers.

Dynamic pump speed algorithm adjusts to protect the sample as material accumulates on the filter.

Mechanical flow meter confirms total volume pumped per deployment.

Pump options:

LV08	*Flow rate	1-8 liters/min
	Max volume	15,000 liters
	Filter type	GF/F [®] , QMA [®] or other membrane or mesh filters
LV30	*Flow rate	5-30 liters/min
	Max volume	36,000 liters (30 Ahr battery)
	Filter type	Large opening mesh filters

**Based on filtering clean water. Field results will vary depending on filter type and particulate load.*

WTS-LV High Capacity Sampler Specifications

DIMENSIONS (UPRIGHT MODEL):

Height: 91 cm (36 in)
Width: 61 cm (24 in)
Depth 33 cm (13 in)

WEIGHT (APPROX):

In air: approximately 73.0 kg
In water: approximately 45.2 kg

COLLECTOR:

Number of samples: Single event sampler
Filter holder material: Black Acetal/142 mm diameter

CONTROLLER:

Housing material: Aluminum, 6061-T6 hard coat anodized
Power: 30 Ah high capacity battery pack
Communications: USB, RS-232, RS-485 with optional added bulkhead connector

OPERATIONS:

Maximum depth: 5,000 m (7,000 m model is available)
Battery: 30 Ahr battery pack
Operating temperature: -4° C to 35° C

FRAME:

Material: Strong back with wire clamps /Type 316 electro polished stainless steel weldment

GRAPHICAL USER INTERFACE:

McLanePro: Custom McLane GUI eases event programming, data offload, and firmware updates.

