

# WS Porti T

## Portable Refrigerated Water Sampler



### *Mobility and Automated Sampling with Active Refrigeration*

The battery-operated WS Porti T is the sampler of choice for field sampling in remote locations without mains power, when samples must be refrigerated.

- Robust housing made from quality stainless steel
- Vacuum/pressure system for precise sample volumes
- No recalibration necessary after cleaning
- Other sampling systems available upon request
- Program linking and parallel operation as standard software
- Simple switching of boxes
- Freezing of samples down to  $-18^{\circ}\text{C}$  possible



# WaterSam WS Porti 1T / 12T / 24T - Technical Specifications

## General

Applications	Portable sampler for indoors / outdoors
Norms	CE
Dimensions (H x W x D)	Porti : 430 x 415 x 290 mm Box 1T/12 T: 415 x 710 x 360 mm Box 24T: 455 x 920 x 500 mm
Weight	Porti: approx. 17.5 kg (incl. battery) Box 1T/12T: approx. 18.5 kg Box 24T: approx. 23.5 kg
Power Requirements	Mains: 100-240 V AC; 50/60 Hz 0.7-0.5 A, 50 VA Battery operation: 24 V DC, 9 Ah Cooler: "Housing and Thermal Control"

## Sampling System

Standard	VAC vacuum-pressure sampling system for time-, volume-, event-proportional sampling
Flow-Proportional (Optional)	- VAR-E: variable volume - Peristaltic pump: variable volume
Sample Volume	12-200 ml; multiple-shot samples possible
Metering Vessel	DURAN 50 borosilicate glass Dishwasher-safe, resistant to acid, alkaline, and temperature changes
Pump Performance	24 V DC; -0.7 bar, 7 m max. lift height, 9 l/min free flow Optional: VacuPress for lift heights up to 13 m or more
Intake Hose	12 mm ID PVC (optional: other diameters)
Wetted Parts	Borosilicate glass, PE, PVC, silicone, stainless steel 304/316Ti (optional: alternative materials as required)

## Sample Bottles / Distribution

Composite Container (without distributor)	10 /10.4 l PE
Distributor (optional)	Motor-driven rotary distributor; 24 V DC
Bottle Synchronization	Automatic
Bottle Sets for WS Porti 12T	12 x 1 l PE 12 x 0.9 l glass with snap lid 2 x 4 l PE
Bottle Sets for WS Porti 24T	24 x 1 l PE 24 x 0.9 l glass with snap lid 4 x 6.4 l PE

## Housing and Thermal Control

WS Porti Housing	Stainless steel 304 Optional: - Stainless steel 316Ti - Powder coating (RAL colours)
Cooler Housing	Polyethylene, with polyurethane insulation
Refrigeration	12/24 V DC; 6 A with battery monitor (external battery necessary) 100-240 V AC; 0.7-1.3 A CFC-free R134a refrigerant
Internal Temperature	Adjustable; -18°C to +10°C
Refrigeration Unit Hourly Run Times Ti=5°C Ta=20°C Ti=5°C Ta=32°C	(Typical data for 12 V DC / 230 V AC) 12% (power draw 7.5 A DC / 0.7 A AC) 22% (power draw 7.5 A DC / 0.7 A AC)

## Standard Controller

General	Microprocessor controller with 4-button operation, backlit 4 x 20 character display, real-time clock, battery backed-up RAM memory (5 years), overload-protected outputs, 4 completely separated analog inputs (differential input)
Software	Menu-based operating system  Up to 9 user-defined sampling programs; any/all programs can be run simultaneously or linked.  Memory for fault, event, and operational conditions, preset operating programs, always switchable.  Preset and user-defined distributor settings
Inputs	4 x analog 0/4-20mA 10 x digital (flow, event, multiple programmable inputs)
Outputs	16 x digital (program active message, fault message, other programmable messages)
Interface	RS 232, optional RS 485
Modem (optional)	Remote operation / fault message via SMS / Remote start via mobile phone
Advanced controller (optional)	See MS3 Controller datasheet

*Additional options and accessories as well as custom equipment available by request.*