

Depth Integrating Sediment Sampler (Suspended Type)

SEDIMENT SAMPLING

General Description

D49 is an **easy-to-use sediment sampler** to take suspended-sediment samples in streams not greater than **10 m in depth**. The instrument is mounted on a hanger bar and attached to the **suspension cable on a gauging winch for lowering and raising**.

The head of the sampler is hinged to permit access to the sample container. Tail fins help to orient the instrument into the stream flow. The head of the sampler is drilled and tapped to receive the intake nozzle which projects into the current for collecting the sample. A port which points downstream is provided on the side of the sampler head from which air escapes as it is displaced by the sample being collected in the container.

Easy handling of heavy samplers

HyQuest Solutions' equipment for sediment sampling has been designed to **facilitate the proper operation of heavier sediment samplers** like D49. For that purpose, general support equipment (steel cables, hanger bars, winches, automated cableways) is available as optional extras. Specific conditions at a site may require special support equipment to improve **ease of handling** in response to the local conditions and to ensure the **safety of the person taking the measurements**. Please ask for advice.



Technical Specifications: See flip side.

HyQuest Solutions' Sediment Sampling Product Portfolio

You can choose from a vast selection of manually or winch-deployed depth-integrating sediment samplers, bedload samplers, rising stage samplers, and their accessories. HyQuest Solutions samplers are based on designs developed by the United States Federal Inter-Agency Sedimentation Project. Please contact us for advice!

Technical Specifications

Type	Suspension depth integration
Material	Cast bronze, epoxy coated
Nozzles	6.3, 4.8 or 3.2 mm (1/4, 3/16 or 1/8 inch)
Sample Container	0.5 litres, nylon, screw cap for DH48, DH59 and D49 units
Max. Depth	10.0 m
Net Weight & Length	28 kg (62 lb), 815 mm
Scope of Delivery	<ul style="list-style-type: none"> ■ 3 nozzles ■ Sample container (see below, additional bottles available as spare parts) ■ Stainless steel hangar bar and retaining pin ■ Robust aluminium carry case
Packing Details	40 kg, 73 x 28 x 27 cm, 0.06 m ³

Accessories



Sampler bottle DH4805:

0.5 litres, nylon, screw cap for DH48, DH59 and D49 units



Winches (WS500, WS400, WS250) and Winch Board (SAN22SS):

HyQuest Solutions' stream gauging winches are hand-operated single drum winches capable of handling Columbus gauging weights up to 45 kg using a winch board (e.g. SAN22SS) or bridge crane (e.g. 3WBC or 4WBC). The winches are designed for ease of operation and service ability in the field: compact, portable, light-weight, and handled easily and safely by one person.



Bridge Cranes 4WBC and 3WBC:

HyQuest Solutions' bridge cranes are collapsible units for discharge measurement or for sediment sampling from bridges.



The cranes are made from structural aluminium and stainless steel. The bridge cranes are simple to put up and fold down into a compact sized package for transport.

Models:

- 4WBC: 4 wheels, used for weights and sediment samplers up to 70 kg
- 3WBC: 3 wheels, light-weight, used for weights and sediment samplers up to 45 kg



Hornet SS (Sediment Sampling) Cableway System

Especially designed for depth integrated sediment sampling with the D49 sampler. The hydrographer can undertake sediment sampling and flood flow measurements in a safe position, well away from any hazards by flood waters. Thus it is the ideal solution for retro-fitting to an existing manned cableway system. The Hornet SS is easy to install and the hoist can be transported from site to site to give the hydrographer flexibility in gauging multiple sites. (Please note: The Hornet SS can also be used for towing an ADCP for flow gauging across a stream or for deployment of a mechanical current meter).

Please ask for details.

Reseller

HyQuest Solutions Australia

✉ sales@hyquestsolutions.com.au
 🌐 www.hyquestsolutions.com

HyQuest Solutions New Zealand

✉ sales@hyquestsolutions.co.nz
 🌐 www.hyquestsolutions.com

HyQuest Solutions Europe

✉ info@hyquestsolutions.eu
 🌐 www.hyquestsolutions.eu

