The Next Generation solution for unmanned hydrographic surveying.

CEE-USV™ is a state of the art, high-performance survey boat incorporating a single beam echo sounder, GNSS positioning, live video, and on-board data management. A high bandwidth radio link to the dedicated CEE-LINK™ shore station allows the operator to record precise bathymetric survey results in real time with the minimum of mobilization effort and maximum productivity.

CEE-USV™ is ideal for surveys in challenging environments such as high velocity or shallow water river cross sections, industrial and contaminated effluent water, or bridge scour monitoring. As soon as the USV is powered-up, survey data are available on the shore for acquisition. The integrated CEE HydroSystems CEESCOPE™ hydrographic instrumentation presents an industry-leading simplicity of operation. Coupled with the unique benefits of a collapsible super-rugged vehicle, the CEE-USV™ presents the next generation USV solution.

Vehicle Specifications:

Length: 1.95 m (77’’), 1.2 m (47’’) bow removed  
Beam: 0.72 m (28’’)  
Draft: 0.18 m (7’’)  
Total weight: 48 kg (105 lbs)  
Speed: 10 kts (5 m/s, 17 ft/s)  
Endurance: Up to 5 hrs  
Batteries: 2-4 NiMH 24V 10 Ah packs  
Motors: 2x high power belt drive & shaft  
Rudder: 2x with independent steering  
RC: Futaba or Hitec 2.4 GHz

CEESCOPE™ Hydrographic Instrumentation:

Ping Rate: 1 – 20 Hz  
Depth Range: 0.2 – 200 m (0.6 - 650 ft)  
Transducers: 33 / 200 kHz, 200 kHz  
Accuracy: 1cm ± 0.1% of depth  
QC: Full water column echogram  
Format: Network (Ethernet) incl. video  
Data logger: On board (HYPACK & CEE format)  
GNSS: DGPS: NovAtel, Hemisphere  
RTK: NovAtel, Trimble RTK  
L-Band: Hemisphere  
UHF: Satel 3AS UHF 400-470 MHz  
Options: ADCP