

# M.V. CARIBBEAN HORIZON

This vessel is a self contained shallow water seismic vessel capable of deploying digital or analogue streamers with clustered sleeve airgun arrays. Towed streamer operations can take place in water depths as low as 3 metres.

For transition zone operations the vessel can operate as source vessel, fixed recording location for bay cable or in a number of other roles.

Long distance mobilisations are made as deck cargo on conventional commercial vessels.



## RECORDING SYSTEM (ANALOGUE)

- Texas Instruments DFS V recording instrument with 120 channels at 2 ms
- LRS 510 streamer with 12.5m groups (maximum length 1500m)
- Horizon peripheral equipment controller (PEC)

## RECORDING SYSTEM (DIGITAL)

- SYNTRAK 480 digital recording system, 480 channel capability and 3480 cartridge recording
- Teledyne designed low noise streamer incorporating 12.5m/25.0m group lengths (maximum length 2400m)

## ENERGY SOURCES

- Clustered sleeve airgun array
- Explosive cord or charges if required
- Horizon ISC source controller for synchronisation and monitoring
- Two Hamworthy air compressors

## NAVIGATION SYSTEMS

- Integrated SCOPE 200 marine navigation system
- DGPS and radio navigation inputs integrated

## VESSEL DETAILS

GRT:	107.46
Length:	22.20m
Beam:	6.80m
Cruising Speed:	9.0 knots
Accommodation:	9 maximum
Normal Draught:	1.50m
(Ballast tank for draught reduction)	

The Caribbean Horizon is purpose built for shallow water work with accommodation and a full seismic installation onboard. Very shallow draught, combined with excellent manoeuvrability from twin screws and rudders, ensures the vessel can fully exploit available water depths. As a consequence coverage can be created further into the transition zone with the more economic towed streamer technique.

Full below decks compartmentalisation and ballast tanks, which can be blown in the event of a grounding, are important safety features. The vessel is equipped with INMARSAT M for global communications.

The SYNTRAK digital modules and associated recording system are reliable and flexible in use, usually configured for 12.5m group lengths but with comprehensive array forming options onboard. For areas where use of a digital streamer might be inappropriate, due to risk from fishing activities or rocky/coral outcrop, an analogue streamer option is available.

Seismic source control, synchronisation and monitoring are performed by the Horizon ISC (integrated source controller) and SHM (source hydrophone monitor). The former configures arrays and controls individual gun timing using the latest SV-3 solenoids and sensors. Near field signatures for each cluster are monitored by the SHM.

Caribbean Horizon can act as a flexible operating platform for a wide range of shallow water survey activities.