

# Comanche 23

# The Comanche 23 is a sub-Atlantic work class electric remotely operated vehicle (ROV).

The Comanche offers a generous auxiliary hydraulic package for work class manipulation and tooling, combined with an advanced and powerful control and diagnostics package for survey and other data collection missions. It also offers high performance, reliability and adaptability, with low capital, operational expenditure and reduced deck space – especially when compared to the alternatives.

The Comanche is currently at work globally in the oil and gas, renewable energy, civil engineering, military and scientific research sectors. The system is supplied with a Tether Management System (TMS).

### **Technical specifications**

Depth rating	3000 msw
Length	2100 mm
Height	1250 mm
Width	1300 mm
Launch weight	1130 kg
Forward speed	3.0 knots
Thrust forward	240 kgf
Thrust lateral	240 kgf
Thrust vertical	225 kgf
Payload	285 kg

### System power requirements

Input supply	3-phase 380-480 VAC -(120A)

### System accessories fitted

1 x Orion (7 function manipulator)
1 x Rigmaster (4 function grabber)
8 x Bowtech LED lamps
1 x Sub-Atlantic P&T
1 x Sub-Atlantic tilt
4 x Cameras
Various skid versions for survey tasks

### **Working limits**

Sea state	7
Wind speed	28 knots
Wave height	2.8 m
Current	3.0 knots

ROVs



## System dimensions (mm)









### **Thrusters**

4 x SPE250 horizontal in 45° vectored configuration

3 x SPE250 vertical 2 of which are vectored outward at front to clear the vehicle lower deck and a single pitch thruster at the rear to counteract manipulator loading effects

### **Control van**

### Standard system equipment

Electronics pod c/w subCAN control, protection and diagnostics system, 907 plus multiplexer and single mode telemetry

Low mass 35 kW / 3000 V / 400 Hz transformer, capacitor, HV fuse and thruster power box

Pan and tilt unit

High torque tilt unit

2000 m rated 215 kg payload buoyancy

Space for mounting user equipment

Aluminium frame supporting internal and external user equipment and live boat launch and recovery

### **Control system and features**

Hands free navigation and station keeping

Hand control unit and graphical user interface

Power management and protection

System condition monitoring and diagnostics telemetry

Single mode fibre integration of all standard and optional data

### Workshop

### 20FT A0 ISO container

Classification safe area

240 Vac input

Racks and cupboards for storage of spares

AC unit

### **Comanche ROV**

Comprehensive work class tooling options

High powered dredging, jetting, pumping and cutting capability

4 x horizontal and 3 x vertical 225lbf thrusters for tilt controlled lift capability

Up to 285 kg payload and diverse skid options

Garage TMS (long excursion) or deep live boat operations

subCAN control giving advanced diagnostics and set-up options

Multiple GigaByte Ethernet options

Full survey / mapping / metrology suite options

Full dynamic positioning / inertial navigation capabilities

Reduced deck footprint / air transportable options

### **Operational equipment**

2000 m rated 285 kgs payload buoyancy

Survey expansion electronics pod

Choice of industry standard:

- Manipulators and cutters
  - Dredge systems
  - Cameras and lights
  - Live download digital stills
  - Obstacle avoidance sonars
  - Motion and navigation reference sensors
  - Geophysical and bathymetric survey sensors
- Non destructive test sensors
- Cleaning jets and brushes
- Pipe and cable tracking and inspection systems
- Drill support and well intervention tooling
- Threat detection
- Imaging and intervention systems

### TMS

Sub-Atlantic type 3

3000 m rated

H 3034 x L 2830 x W 1664

SWL 3500 kg

Through frame load 2000 kg

750 m capacity of 21 mm tether





DATA SHEET

20Vs