

■ 58°06'20"N 03°05'35"W



■ 58°06'20"N 03°05'35"W

# MV PATRIOT

## Offshore Support Vessel

 **Beam**  
Automating offshore wind

✉ [sales@beam.global](mailto:sales@beam.global)

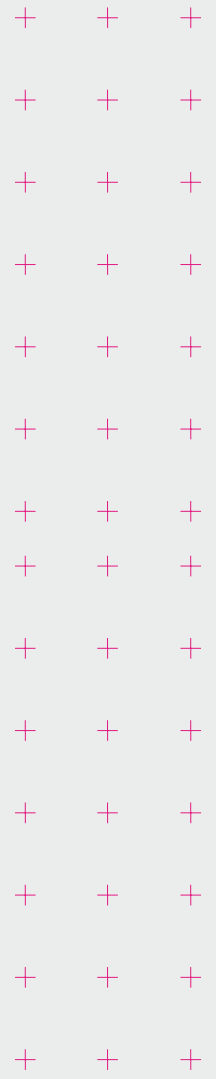


# A Powerhouse for Advanced Offshore Wind and Decommissioning Projects.

MV Patriot's active heave crane and 682sqm deck capacity will bolster Beam's construction and operations and maintenance (O&M) expertise. The vessel consolidates the company's site clearance ability, including debris and boulder removal and unexploded ordinance (UXO) navigation.

MV Patriot's significant deck space is set to reduce the volume of trips back to shore. In addition, its DP2 station keeping capability will provide a stable platform for launch and recovery in marginal weather. This will allow Beam to schedule wider working windows across surveys and remotely operated vehicle (ROV) inspections.

As with Beam's other vessels, MV Patriot will be permanently installed with best-in-class ROVs. The WROV onboard will be fitted with Beam's state-of-the-art SubSLAM technology, allowing for live inspections and precise 3D reconstructions. The MV Patriot will enable full site data capture offshore and ship-to-shore communications, with live streaming assisting real-time decision making.





## General

TYPE	Offshore Support Vessel
CLASS	BV
FLAG	NIS
REBUILT	Conversion 2024
CALL SIGN	LGJX3
IMO	9350795
MMSI	257884000
PORT OF REGISTRY	Aalesund
HOME PORTS	Ulsteinvik

## Dimensions

LENGTH	73,6 m
BREADTH	16,00 m
DRAFT (MIN. / MAX.)	4 m / 5.5 m
DEPTH	Minimum operating water depth 5 m
GROSS TONNAGE	2532 T
NETT TONNAGE	1120 T
DEADWEIGHT	3526 T

## Performance

MAX. SPEED + FUEL CONSUMPTION	14knt - 18 T / day
ECO. SPEED + FUEL CONSUMPTION	10knt - 12 T / day
DP ACTIVITIES	8 T / day
FUEL CONSUMPTION SURVEY	At 4knots - 7 T / day
FUEL CONSUMPTION PORT	1 T / day

## Deck Equipment

DECK AIR SUPPLY	6 Bar
FRESH WATER SUPPLY	4 Bar
DECK CRANE	Aft Crane PS "ABAS" 3; Aft Crane SB "Triplex" - 5 T
SUBSEA CRANE	MacGregor 20t AHC
STERN A-FRAME	15 T

## Tank Capacities and Deck Area

FRESH WATER	460 m <sup>3</sup>
BALLAST WATER	1300 m <sup>3</sup>
FUEL TANK	1000 m <sup>3</sup>
DECK AREA	682 m <sup>2</sup>

## Tank Capacities and Deck Area

DAVIT SAFE WORKING LOAD	1 T
FAST RESCUE CRAFT	MOB Boat Norsafe Midget-500 MK II

## Accommodation

BERTHS	46
CABINS	25
SINGLE CABINS	4
DOUBLE CABINS	21
OFFICES	3
HOSPITAL	1
GYM	1
RECREATION ROOM	2





## Machinery and Propulsion

### Main Engines: 2x Bergen KRMB9

ENGINE OUTPUT APPROX.	2x 2005 kW
ENGINE R.P.M.	825
FUEL	Gas oil
FLYWHEEL END DRIVE	Gearbox

### Stern Thruster: 2x Kamewa Ulstein Tunnel Thruster TT1650 DPN CP

TYPE	TT1650
ELECTRIC MOTOR POWER	590 kW
ELECTRICAL SUPPLY	440/3/60
MOTOR SPEED	1180 RPM
PROPELLER SPEED APPROX.	312 RPM
PROPELLER TIP SPEED APPROX.	26,9 m/s
PROPELLER DIAMETER	1650 mm
TUNNEL DIAMETER	1680 mm/1714 mm (inside/outside)

### Bow Thruster 2x Kamewa Ulstein Tunnel Thruster TT1850 DPN CP

TYPE	TT1850
ELECTRIC MOTOR POWER	590 kW
ELECTRICAL SUPPLY	440/3/60
MOTOR SPEED	1180 RPM
PROPELLER SPEED APPROX.	250 RPM
PROPELLER TIP SPEED APPROX.	24,2 m/s
PROPELLER DIAMETER	1850 mm
TUNNEL DIAMETER	1880 mm/1924 mm (inside/outside)

### Controllable pitch propellerplant

MAKE	2x KaMeWa Ulstein 600 AGSC
NUMBER OF PROPELLERS	2
NUMBER OF BLADES	4 each propeller, Ni-Al-Bronze
PROPELLER DIAMETER	Approx. 2900 mm
PROPELLER SPEED	Approx 197 RPM

### Main Generators 2x Shaft generators

OUTPUT APPROX	1600 kVA
VOLTAGE	450 V
FREQUENCY	60 Hz
RPM	1800
TEMPERATURE CLASS	F
ENCLOSURE	IP 23
COOLING	Air cooled with fine grade filters

### Auxiliary Generators 2x Scania DI 12 62M

The vessel is equipped with diesel engine driven el. generators.

GENERATOR OUTPUT APPROX.	250 (310 kVA)
VOLTAGE	450 V
FREQUENCY	60 Hz
RPM	1800
GENERATOR COOLANT	Air cooled with fine grade filters
ENCLOSURE	IP 23
DIESEL ENGINE FUEL	Gas oil

### Emergency Generator - John Deer Power Tech 4.5 liter 4045 Marine Engine

GENERATOR OUTPUT APPROX.	48 (60kVA)
VOLTAGE	450 V
FREQUENCY	60 Hz
RPM	1800
TEMPERATURE CLASS	F
ENCLOSURE	IP 23
COOLING	Air cooled
DIESEL ENGINE FUEL	Gas oil, ISO 8217

## Dynamic Positioning System

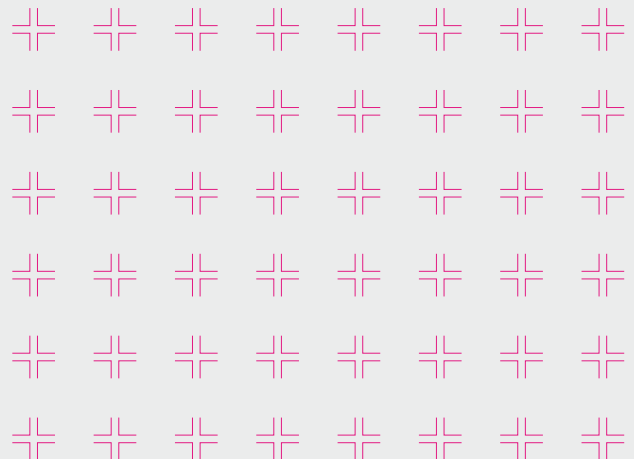
DP TYPE	Bridgemate DP 2
MANUFACTURER	Marine Technologies
DGPS	FURUNO GP-170
GYRO'S	3x Bridgemate Meridian
CYSCAN	1x Guidance Marine
ACCOUSTIC POSITIONING	Kongsberg HiPaP 452

## Survey Equipment

PRIMARY GNSS & INS	Applanix POS MV Oceanmaster w/ Trimble RTX corrections
SECONDARY GNSS	Trimble R75 w/ Fugro Marinestar corrections
PRIMARY HEADING AND MOTION	Applanix POS MV Oceanmaster w/ Trimble RTX corrections
SECONDARY HEADING AND MOTION	iXblue Octans

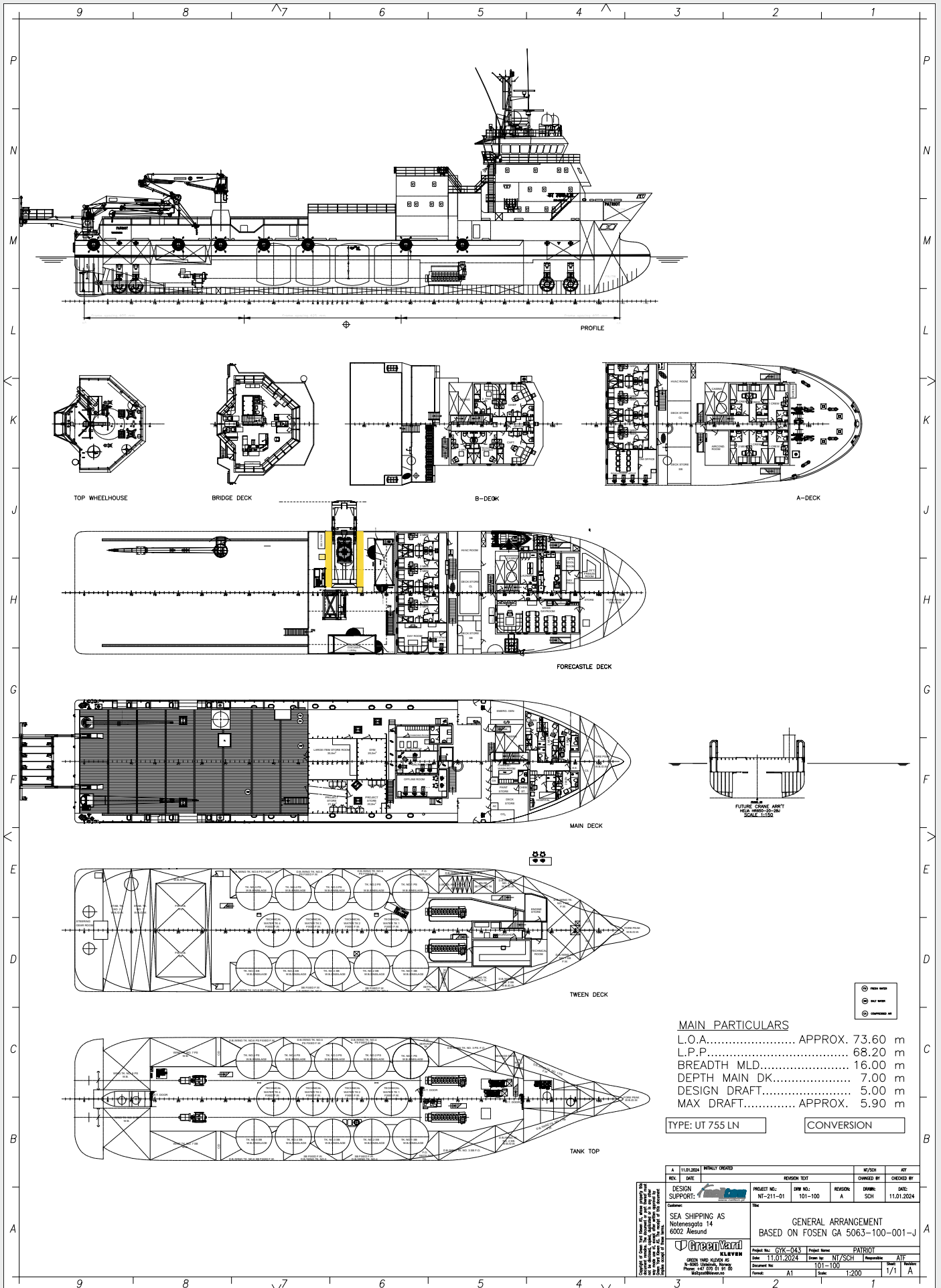
## Radio and Navigation Equipment

COMPASS	Magnetic - none, Gyro - 3x Bridgemate Meridian
RADAR	2x Furuno (X-Band, S-Band)
GMDSS	3x VHF's Sailor, 1 - MF/HF Sailor 6301, 2x Inm-C Sailor DT4646E
ECDIS	Telko TECDIS T-2138A
EPIRB	2x Jotron TRON 60s
SART	2x Jotron SART20
AIS	FURUNO FA-150





# MV Patriot General Arrangement





# HMC 1891 LKO 100-15 (200-8) AHC - Knuckle jib slewing crane

SWL 100 kN (10 metric tonnes) @ 15 m

SWL, high lift mode 200 kN (20 metric tonnes) @ 8 m

Working radius max.: 15 m

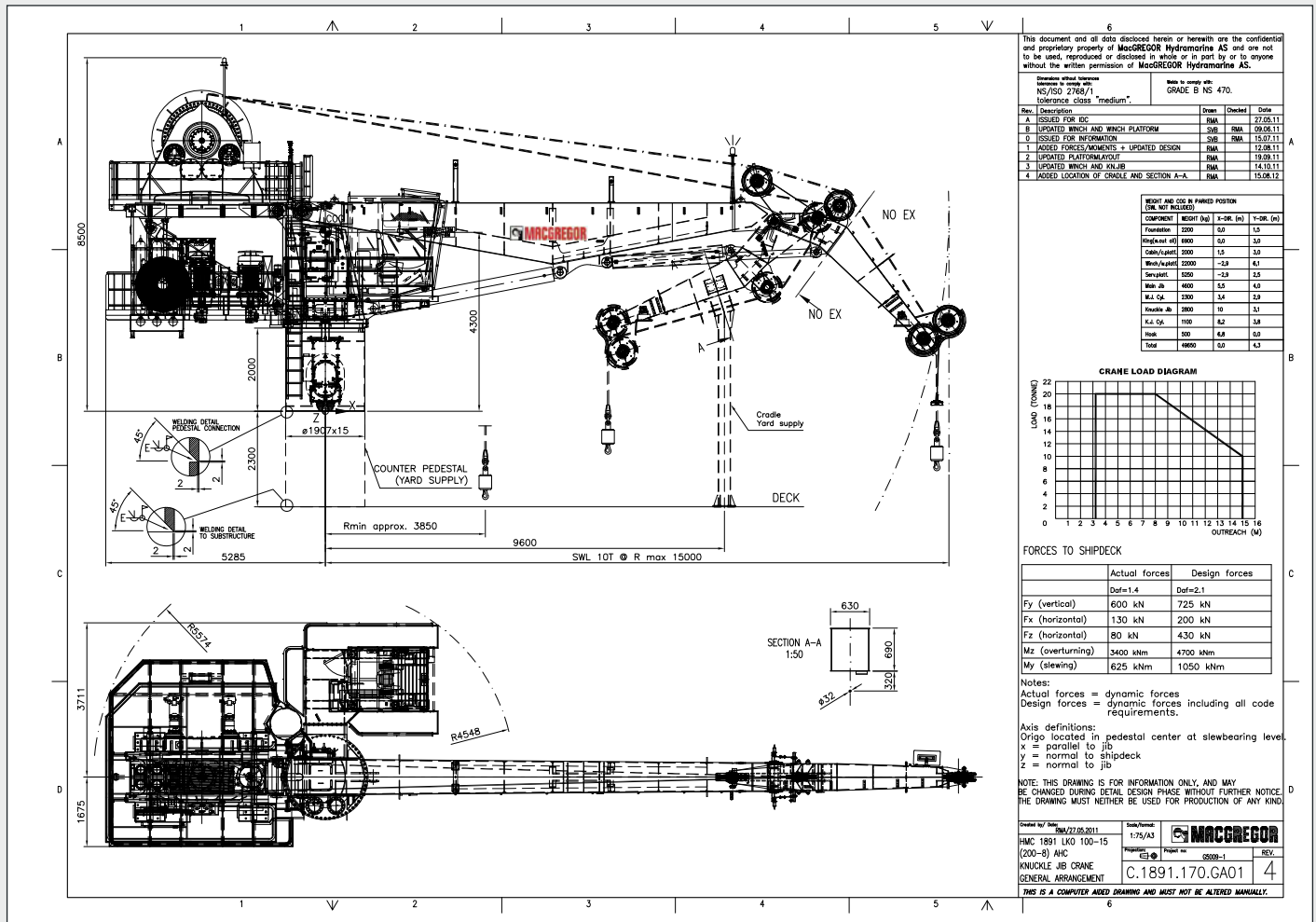
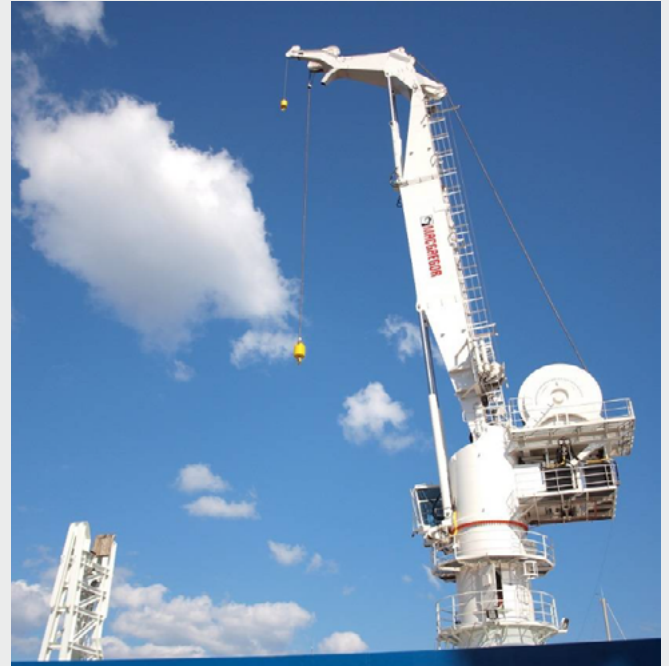
Working radius min.: ~3.8 m

Hoisting speed empty hook & 100 kN 0-60 m/min stepless variable

Hoisting speed 200 kN 0-30 m/min stepless variable

Hook travel 1500 m from water line

Slew sector 360° endless slewing





# Triton XLS WROV

OPERATING CONDITIONS	Up to and including Sea State 6 (3g)
WEIGHT IN AIR	4400 kg
DIMENSIONS LXWXH	305 x 178 x 193 cm
DEPTH RATING	3000msw
HYDRAULIC POWER	112kW 150HP
RESERVE PAYLOAD	200 kg
BOLLARD PULL (MIN)	1100 kgf
FWD/AFT SURFACE SPEED	3+ knots
LATERAL SURFACE SURFACE	2+ Knots
THROUGH FRAME LIFT CAPACITY	3000 kg
TETHER CAPACITY	350 m of 35 mm Tether
AUTO FUNCTIONS	Heading, Depth, Altitude, Pitch and Roll
DIGITAL VIDEO RECORDER (DVR)	Digital Edge - 4 Channel Inspection DVR with Overlay

## Equipment

Manipulator 1	Schilling T4, 7-function
Manipulator 2	Rigmaster, 5-function
Pan and Tilt	2x Tritech P+T
Lighting	2x Rosys 120W Q-LED floodlamp 6x DSPL 90W dimmable LED lamp
Cameras	SubSLAM X2 4K or HD 5x Standard Definition Colour
Obstacle Avoidance Sonar	Tritech Super Seaking DST
Doppler Velocity Log	RDI Workhorse Navigator
Survey Pod Communication	RS232/ RS482/ RS422 Ethernet
Survey Pod Power	24Vdc/ 48Vdc 110Vac

