



MODEL 750



The Model 750 Telemetry Buoy is offered as an accessory item to allow real time data telemetry and communications with standard Valeport instrumentation such as wave recorders, tide gauges, current meters and multi-parameter CTDs. The buoy is designed to be suitable for coastal environments, and is available with a choice of UHF or GSM communication options. Alternatively, the actual telemetry module may be supplied as an OEM component for fitting to larger buoys or structures.

Buoy

Dimensions

Overall Height: 3 metres (1.3m below water, 1.7m above).

Spar Diameter: 50mm

Buoyancy

Diameter: 0.60m

Buoyancy: full submersion 88kg
(Additional 60 kg buoyancy module also available)

Materials:

Spar: Stainless Steel

Electronics Pod: Stainless Steel

Buoyancy: Polyethylene with Polyurethane foam filling

Mooring: 2 off 10mmØ holes, acetal lined, for shackles

Light:

Type: Solar powered marine light

Colour: Amber

Range: 1.6km

Flash rate: Factory set 10, 15 or 60 flashes per minute

Operating life: 5 to 8 years

Power source: Integral solar cell

Light source: High intensity LEDs

Battery

Sealed 12v lead acid. 24 Ah capacity. [Yuasa NP24-12]. Safety pressure relief valve in spar mast.

Antenna

Unity Gain omni-directional co-linear antenna.

UHF Radio Transmitter

Frequency: 458.5 to 458.9MHz

Channels: 35

Spacing: 12.5KHz

Selection: User selectable via switches

Licence: Conforms to MPT 1329 and European ETSI 300-220 standards

RF Power: Factory set to 100mW nominal peak output to comply with MPT1329

Modem

Input data rate: 19200 baud

Tx data rate: 9600 bits/sec

Interface: RS232

Power

Input voltage: 12v DC nominal

Supply current: 410 mA (transmit)

120 mA (receive)

0.04 mA (quiescent)

UHF Radio Receiver

Specifications as Transmitter, except:

Size: 200 x 180 x 70mm

Weight: 1.5 kg

Antenna: 3dB colinear omni-directional with 10m cable

Input voltage: External 10 to 28vDC nominal. Power supply must not be a switched mode design as this can cause interference.

Supply current: 410 mA (transmit)

120 mA (receive)

Connector: 9 way D type

GSM Transmitter

SIMM: Customer Supplied (including Pay As You Go type)

Modem: Input data rate: 19200 baud

Tx data rate: 9600 bits/sec

Interface: RS232

Power

Input voltage: 12v DC nominal

Supply current: 305 mA (during call)

110 mA (standby)

0.04 mA (quiescent)

Control

GSM controller is passive, so it must be dialled up - it cannot call out. Controller can be set to be on standby permanently, or to switch on (into standby mode) for set time periods (e.g for 30 mins every 6 hours).

Ordering

- 0750001** Model 750 Telemetry Buoy, fitted with selectable frequency UHF radio, unity gain omni-directional antenna, solar powered marine light and 12vDC sealed lead acid battery.
- 0750002** Model 750 Telemetry Buoy, fitted with GSM data telemetry unit, unity gain omni-directional antenna, solar powered marine light and 12vDC sealed lead acid battery. Customer to supply SIMM card.
- 0740012** Desktop radio receiver housing, fitted with selectable frequency UHF radio. Supplied with 3dB omni-directional antenna on 10m cable, 12vDC power lead and RS232 output lead.
- 0750006** 50m armoured signal cable with mechanical strain relief and electrical connections to buoy and instrument.