



UHF Radio Telemetry



Valeport radio telemetry solutions are centered on our IP67 housed package offering UHF transmission options. The robust housing contains back up battery capability to cover short-term survey work or power outs. Compatible with most Valeport products, the units are designed to provide transparent links between instrument and operating software, as well as third party Internet / FTP data display services.

Site Transceiver

Housing:	IP67 moulded ABS box with o-ring seals, and separate battery & electronics compartments
Power input:	Requires 9 – 29V DC.
Backup Battery:	The telemetry unit is fitted with 4 Alkaline D-Cell batteries to provide back-up power during long term deployments or power for short term deployments. Internal battery Capacity is 13,000mAh @ 6vDC (based on 75% efficiency)
Antenna:	Standard 0dB whip antenna, plugged directly onto housing. Optional 3dB omni-directional antenna with 10m cable
Frequency:	458.5 to 458.95 MHz
Channels:	10 @ 0.05 MHz spacing
Channel select:	Push button switches inside housing
License:	Conforms to EN 300 220, EN 300 133 approvals.
Power output:	500mW maximum, to comply with UK MPT1329 regulations
Dimensions:	260 x 160 x 55mm
Weight:	2kg

Base Transceiver

Housing:	Painted aluminum housing, with connections for antenna, PC interface and external DC power.
Power input:	12V DC, via cable supplied.
Antenna:	3dB omni-directional antenna with 10m cable.
Frequency:	458.5 to 458.95 MHz
Channels:	10 @ 0.05 MHz spacing
Channel select:	Push button switches on front panel
License:	Conforms to EN 300 220, EN 300 133 approvals.
Power output:	500mW maximum to comply with UK MPT1329 regulations
PC Interface:	9 pin D type connector with RS232 output to PC. 9 pin to 9 pin interface cable supplied.
Dimensions:	200 x 180 x 90mm
Weight:	2kg

Antenna

Gain over ½ wave dipole	3dB
VSWR	Better than 1.5:1 over the operating band
Max Input Power	150W
Input Impedance	50
Bandwidth	±2% of centre frequency
Polarisation	Vertical
Half Power	32°
Beamwidth	
Connection	10m length of RG213 terminated N type socket and PVC sleeve
Radiating Elements	Brass rod plasfilm coated
Encapsulation	Reinforced glass fibre tube
Length	1.160m @ 460MHz
Weight	1.1kg
Wind Loading	6.4kgf @ wind velocity of 160kph



Ordering

04000566:	UHF Radio Transceiver in IP67 housing. Supplied with selectable frequency synthesised UHF radio (458.5 – 458.9MHz), "rubber duck" type antenna and comms lead to TideMaster.
FUC3-458M10:	Option: 3dB antenna and 10m cable for transmitter
04000569:	Radio Receiver Unit in Desktop housing. Supplied with selectable frequency synthesised UHF radio (458.5 – 458.9MHz), 3dB antenna & 10m cable, external DC power lead and comms lead to PC
04000570:	Radio Receiver Unit in Desktop housing with LED display. Supplied with selectable frequency synthesised UHF radio (458.5 – 458.9MHz), 3dB antenna & 10m cable, external DC power lead and comms lead to PC
04000571:	Radio Receiver Unit in Desktop housing with LED display and selector switch for multi-gauge network. Supplied with selectable frequency synthesised UHF radio (458.5 – 458.9MHz), 3dB antenna & 10m cable, external DC power lead and comms lead to PC
0740018:	Solar power option c/w solar panel, frame and battery pack in environmental housing

Note:

It is the customer's responsibility to ensure that the chosen radio frequency is clear and available for use, and that any required fees are paid or licences obtained. Valeport accepts no responsibility or liability for system failure due to radio interference from a third party source.