

Receiver overview

General receiver properties			
<ul style="list-style-type: none"> Shielded RF section Seven servo channels Does not support telemetry Error input (surfaces vessel) Error output (NPN, to launch a buoy) 		<ul style="list-style-type: none"> Low battery and RF signal loss safety feature Simplex/one-way digital radio communication 27MHz, 6 channels, FSK, 2400bit/s, BW=10kHz Reverse polarity and over voltage protection VS¹ VS: 6-12V re-chargeable battery (lead acid, Lithium, NiMH) 	
Standard series	ONSEMI A5043 transceiver IC with extensive ² RF front-end		Common properties <ul style="list-style-type: none"> 57x100mm 3D accelerometer 4x end-limit input³ 7x digital output (ULN2003) Small configuration jumpers Supports serial configuration Does not support auxiliary PCB Supports multiple ballast systems Buffered 3.3V or 5.0V servo pulses Separate connections for VS, VNPN (ULN2003) and VSERVO
	Radiometrix LMRO receiver module		
Mini series	ONSEMI AX5043 transceiver IC with standard RF front-end See note ⁴		Main properties <ul style="list-style-type: none"> 45x83mm Supports piston tanks No serial configuration Supports auxiliary PCB⁵ Fixed 3.3V servo pulses Large configuration jumpers No digital outputs (ULN2003) Separate connections VS & VSERVO
	Radiometrix LMRO receiver module		Main properties <ul style="list-style-type: none"> 48x82mm 4x end-limit input Supports piston tanks No serial configuration Supports auxiliary PCB Fixed 3.3V servo pulses Small configuration jumpers No digital outputs (ULN2003) Separate connections VS & VSERVO

¹ Supply voltage for on board electronics (VNPN and/or VSERVO can/may equal VS)

² Amongst others includes a band pass filter and LNA (the latter to compensate for filter losses)

³ Can for instance be used to stop piston tanks at their end position

⁴ Hardware supports half-duplex digital radio communication (transmit power=3mW@50Ω)

⁵ 25x60mm, 3.3V, connects to receiver via 4w flat cable, supports: 3D accelerometer, pressure sensor, 2x water sensor and 4x end-limit input