

# ELECTROMAGNETIC RECEIVER

## MODULAR ROV – EXTENDED ANTENNA

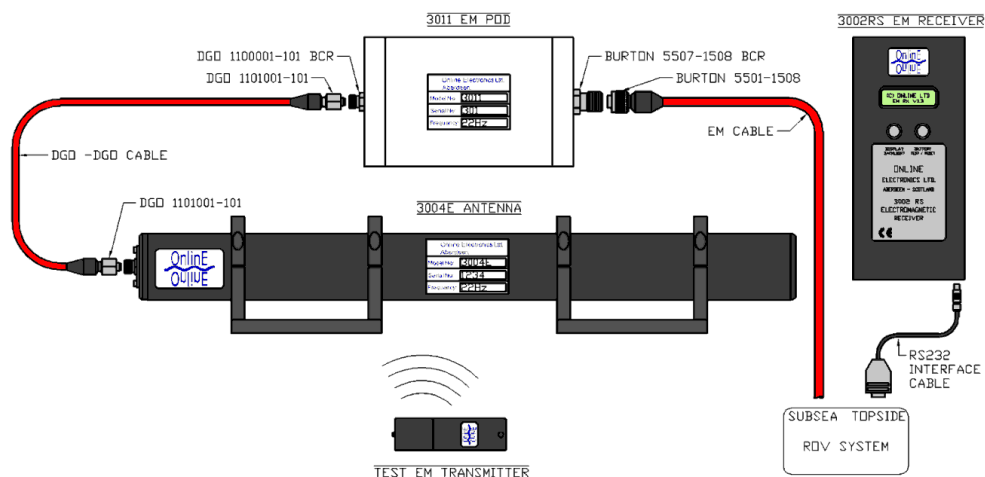
Online Electronics' versatile 3002RS 3004E 3011 ROV system, is a 22Hz Electromagnetic (EM) pipeline pig monitoring system used for pig locating, tracking and signalling subsea. The system can be used to find lost and stuck pigs, to confirm a pig has left or arrived at a particular location and for general monitoring of pig movement.

The 3002RS is a portable, battery operated EM receiver designed to receive 22Hz signals. The receiver has a loudspeaker, headphone audio outputs and an easy to interpret backlit display which indicates signal strength.

The 3004E EM antenna is longer than the standard 3004 ROV antenna and offers enhanced sensitivity allowing the system to detect weaker signals. The antenna, in conjunction with the 3002RS receiver, allows the operator to locate 22Hz EM transmitters by observing the signal level received and the relative position of the antenna.

The 3011 EM POD is a subsea interface which communicates with the 3002RS via a serial RS232 data link. The 3011 EM POD receives 22Hz electromagnetic signals from the 3004 EM antenna and transmits them to the 3002RS over the RS232 link.

Detection through pipeline walls in excess of 40mm thick is possible dependent on several factors including the type of transmitter used, distance between antenna and transmitter, pig design, pig speed, pipeline diameter, pipeline material and background EM noise levels. Please contact OEL to discuss the most effective configuration



### Key Benefits:

- EM transmitter detection without opening launcher/receiver door saving time
- Topside Sensitivity adjustment allowing accurate location of EM transmitters via ROV
- Minimal set up required ensuring time is not lost setting up multiple parameters
- Powered by Alkaline cells so no issues with transportation or certification

### 3002RS

Frequency ..... 22Hz  
Battery life at +5°C ..... 35 hours  
Battery type ..... 3VDC (2x Alkaline DURACELL ID1400 C CELLS)  
Operating temperature range..... 0°C to +50°C (+32°F to +122°F)  
Height..... 60mm (2.4")  
Width..... 134mm (5.3")  
Length ..... 291mm (11.5")  
Housing material .....Acetal  
Weight ..... 2.3kg (5lbs)

### 3004E ANTENNA

Operating depth .....2500m (8202ft)  
Operating temperature range.....-20°C to +60°C (-4°F to +140°F)  
Length (including connectors) ..... 804mm (32")  
Diameter ..... 80mm (3")  
Height (including mount) .....140mm (5.5")  
Weight (including mount) .....8kg (17.5lbs)  
Housing material .....Acetal

### 3011 EM POD

Supply voltage (from ROV) .....+24VDC (+18VDC to +36VDC)  
Operating depth .....3,000m (9,842ft)  
Operating temperature range.....-2°C to +50°C (+28°F to +122°F)  
Length (including connectors) ..... 300mm (11.8")  
Diameter ..... 155mm (6.1")  
Housing material .....Acetal  
Weight (including mount) ..... 6.8kg (15lbs)

