



Electromagnetic Pig Tracking System

The **Imenco Nautronix** electromagnetic tracking system is designed as an accurate pig locator for on or offshore lines. Used in conjunction with the receiver, pigs can be tracked and located in pipelines buried to several metres, with an accuracy of a few centimetres.

The electromagnetic transmitter is activated/deactivated by rotating the endcap. The on/off switch is internal, which means there is no reason to open the housing except for the occasional battery change. High grade plastics, composites and metals are used in the production of the transmitters, making them exceptionally robust and reliable.

The electromagnetic system can be used with complete confidence in subsea gas lines, where acoustic systems are less effective. In addition, it is the only system proven for use in multi-layer flexible lines.

The transmitter signal features a null spot at its centre allowing centimetre accuracy detection. It can either be buried entirely within a foam pig, protruding from a steel bodied pig or in smaller diameter pipes, towed behind using the towing eye attachment. A hand held wand type antenna with pistol grip, allows accurate pointing and location during land tracking. The ruggedised receiver has a sensitivity control and audible detection alarm, thus allowing easy and accurate operation of the system.

For subsea applications, a special ROV antenna is available with additional circuitry to drive the signal up the umbilical to a standard receiver. A diver held receiver is also available featuring a unique combination of visual and audible outputs.



Models 2906, 6380, 6385 and 6750B



Model 2910A

Technical Specification

Transmitters						
Model	2900	2902	2903	2905	2908	2910A
Battery life	400	1,600	600	1,000	400	960 (continuous) 1,800 (pulsed)
Max range in air (m)	14	14	25	25 (min)	14	5
Max operating pressure (bar)	100	100	100	300	400	100
Operating voltage (Vdc)	15	18	70	50	15	3
Battery type	AA cells	Alkaline pack	Lithium pack	Lithium pack	AA cells	3 V lithium battery
Number of cells	10	0114-4000 batt assy	0114-4010 batt assy	0114-3601 batt assy	10	1
Activation method	Internal switch via rotating end cap	Internal switch via rotating end cap	External short link	Mechanical link / liquid	Internal switch via rotating end cap	External short link
Operating temperature range (°C)	0 to 60	0 to 60	0 to 60	0 to 70	0 to 70	0 to 70
Storage temperature range (°C)	-10 to 70	-10 to 70	-10 to 70	-10 to 70	-10 to 70	-10 to 70
Housing material	PVC	PVC	PVC	PVC	Titanium 6AL/4V Grade 5	Anodised aluminium
Length (m)	335	547	547	585	335	190
Diameter (mm)	76	76	76	120	76	38
Weight (kg)	2.6	3.5	3.5	17	2.6	0.7

Receivers and Antennae					
Model	6385	6750B	6751	6380	6565
Type	Portable receiver	Hand held antenna	ROV antenna	Diver held receiver	A/D signal convertor
Battery life (hours)	50 (min)	n/a	n/a	300	-
Battery requirement	1.5 V AA cells	n/a	n/a	1.5 V C cells (8)	-
Operating voltage	9 VDC	-	ROV supply 24 VDC	8 to 15 VDC	ROV supply 24 VDC
Material	Cast aluminium	Nylon	Nylon	Hard anodised aluminium	316 SST
Display	6 character LCD	-	-	Audio and visual	-
Maximum operating depth (m)	Surface unit	Surface unit	1,200	300	2,000
Operating temperature (°C)	0 to 70	0 to 70	0 to 70	0 to 60	0 to 70
Storage temperature (°C)	-10 to 70	-10 to 70	-10 to 70	-10 to 70	-10 to 70
Output	Buzzer / meter	Analog	Analog	BAC display / audible deck	RS485 / RS232

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