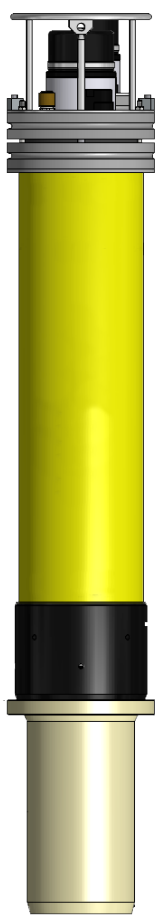
NASNet® Mobile Transceiver (MTrx)

NASNet® Mobile Transceivers (MTrx) are used to provide accurate positioning for remote objects through the water column, from seabed to surface. NASNet® MTrx can also be used as an acoustic data telemetry link for internal or external interfaced sensors. NASNet® MTrx is a battery powered unit primarily used for positioning objects which have no physical data or power link to the vessel or ROV.

NASNet® MTrx can also be used as a source of range data. A prime example of this functionality would be to use an MTrx to position a structure during installation and then use as a range data from the as-installed position as an additional reference range for subsequent structure installations.

Features & Benefits

- Structure and pipeline positioning solution for deepwater subsea construction activities
- Internal depth and inclinometer sensors
- Capability to interface and relay external sensor data information
- Monitoring of remote object e.g. Risers
- Transfer of sensor data from remote objects
- Pipeline bundle monitoring during tow
- Real-time position QC of NASNet® positioning
- Fully compatible with all NASNet® Station systems and ADS^2 signalling systems
- Fast update rate (typically 1Hz) in any water depth
- Reliable communications due to advanced digital signalling techniques
- Robust acoustic data transfer capability
- True multi-user positioning system
- Unlimited tracked objects with no acoustic interference
- No frequency management issues and highly automated functionality



For further information, email
nautronix@imenco.com

imenco SMART SOLUTIONS

NASNet® Mobile Transceiver (MTrx)

NASNet® MTrx Technical Summary

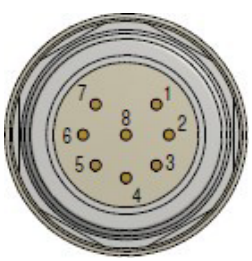
Overview

Operating frequency	11.25kHz with a 3kHz spread	Part number		8006–5303
Signalling	Acoustic Digital Spread Spectrum (ADS^2)	External dimensions		1140 x 244mm (diameter)
Power output	Programmable 157–196 dB re 1 µPa	Weight in air		66kg
Pulse rate	Up to every 1 second range pulse	Weight in water		33kg
Transmitter beam width	210°	Replacement battery options		256-206-000 alkaline
Depth rating	4000 msw (options for 6000msw)	Battery life	Typical	34 days *
Construction	Aluminum 6028–T6		Self discharge	1200 days minimum
External interface supported	RS485/422		Listening mode	1080 days minimum

*Operational at 180 (dB re 1 µPa) with a 1Hz update rate. Includes depth, pitch and roll individual telemetry at 0.1 Hz. Power output levels between 157 – 190 dB will affect Battery life.

Internal sensors	Integrated CDL mini Tilt	Accuracy	0.05
		Resolution	0.01
	Integrated kellar series 33x standard	Accuracy	0.1% FS standard

Interfacing



Bulkhead impulse connector pin out

Pin	Designation
1	Debug Tx (diagnostic only)
2	Gnd
3	N/C
4	Debug Rx (diagnostic only)
5	RS485A/RS422 (data+)
6	RS485B/RS422 (data-)
7	BATT 0V
8	+24V

Impulse connector	MHDG-8-BCR-NSO (View of mating face)
Optional interface tail	Part Number: 3014–0498

Compatible Options

Acoustic release	Part number	135-213-000
Buoyancy	Part number Dimensions weight in air weight in water	806–5202 929 x 654 x 612mm 165.6 kg 92.1kg ±6.8kg net buoyancy
MS adapter stab	Part number Ext. Dimensions Weight in air Weight in Water	806–5103 354 x 178 mm (diameter) 6kg 0.8kg

For further information, email
nautronix@imenco.com

imenco SMART SOLUTIONS