

## 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<sup>2</sup> 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

### NASNet® MTrx Technical Summary


#### Overview

Operating frequency	11.25kHz with a 3kHz spread	Part number	8006-5303	
Signalling	Acoustic Digital Spread Spectrum (ADS <sup>2</sup> )	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 6000 msw)	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 0.1Hz. Power output levels between 157 - 190 dB will affect battery life.

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

#### Interfacing

	Bulkhead impulse connector pin outs		Acoustic release	Part number	135-213-000
	Pin	Designation	Buoyancy	Part number Dimensions Weight in air Weight in water	806-5202 929 x 654 x 612mm 165.6kg 92.1kg ± 6.8kg net buoyancy
	1	Debug Tx (diagnostic only)			
	2	Gnd			
	3	N/C			
	4	Debug Rx (diagnostic only)			
	5	RS485A/RS422 (data +)			
	6	RS485B/RS422 (data -)	MS adapter stab	Part number Ext. Dimensions Weight in air Weight in water	806-5103  354 x 178 (diameter) mm 6kg 0.8kg
	7	BATT 0V			
8	+24V				
Impulse connector	MHDG-8-BCR-NSO (view of mating face)				
Optional interface tail	Part number: 3014-0498				

## Smart Solutions

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