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 ADS² 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
- Signalling: Acoustic Digital Spread Spectrum (ADS²)
- Power output: Programmable 157 – 196 dB re 1 µPa
- Pulse rate: Up to every 1 second range pulse
- Transmitter beam width: 210°
- Depth rating: 4000 msw (options for 6000 msw)
- Construction: Aluminum 6028-T6
- External interface supported: RS485/422

#### Internal sensors
- Integrated CDL mini tilt: Accuracy 0.05°, Resolution 0.01°
- Integrated kellars series 33x standard: Accuracy 0.1% FS standard

#### Interfacing
- Bulkhead impulse connector pin outs
- Acoustic release: Part number 806-5202
- Buoyancy: Part number 806-5103

#### External Interface
- Replacement battery options: 256-206-000 alkaline
- Battery life: Typical 34 days*, Self discharge 1200 days minimum
- 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.

#### Dimensions

<table>
<thead>
<tr>
<th>Part number</th>
<th>Dimensions</th>
<th>Weight in air</th>
<th>Weight in water</th>
</tr>
</thead>
<tbody>
<tr>
<td>806-5202</td>
<td>929 x 654 x 612mm</td>
<td>165.6kg</td>
<td>92.1kg ± 6.8kg</td>
</tr>
<tr>
<td>806-5103</td>
<td>354 x 178 (diameter) mm</td>
<td>6kg</td>
<td>0.8kg</td>
</tr>
</tbody>
</table>

#### Smart Solutions

nautronix@imenco.com
www.imenco.com