

NASNet® Compact Station (CS)

NASNet® Compact Stations (CS) offers a simplified, reduced duration version of the NASNet® Station whilst retaining the benefits of the NASNet® broadcast signalling in an elevated transmitter position. In this configuration long range acoustic coverage is achieved, making deployment of an accurate field wide positioning service economically viable.

The NASNet® CS uses the same patented Buoy Tracking System (BTS) as NASNet® Stations to monitor and correct buoy movement, thereby maintaining high accuracy positioning even in areas of strong seabed current. Calibration of the NASNet® CS is undertaken by 'box-in' where ranges are acquired between the vessel and CS base unit as the vessel sails round the deployed location. In this manner an accurate position of the base is established and used as part of the BTS to derive position of the tethered units.

Features & Benefits

- Fewer seabed assets allowing accurate full field positioning to be operationally and economically viable
- Full field coverage for life-of-field operations
- Ideal solution for subsea ROV and structure positioning for deepwater construction activities
- Robust (independent of GPS) position reference for surface positioning e.g. dynamic positioning reference
- Reliable communications due to advanced digital signalling techniques
- True multi-user positioning system with unlimited tracked objects
- Fast update rate in any water depth and no acoustic interference
- No frequency management issues with highly automated functionality
- Long range capability providing wide area coverage
- Fully compatible with all NASNet® system functions
- Utilises Buoy Tracking System (BTS) to monitor and correct elevated position reference
- Based on dual standard NASNet® MS
- Signalling compatible with ADS² systems
- Tether length from 10m to 30m, allowing typical seabed ranges of 2500m to 3000m



NASNet® CS Technical Summary

NASNet® CS 8006-3000

	Qty	Part number	Description	Weight on air (kg)	Weight in water (kg)
Comprises	1	8006-9110	NASNet® CS base frame fabrication	180	156
	1	8006-5450	NASNet® MS lithium CS - option alkaline	158	115
	3	8006-9019	NASNet® CS beacon retaining rigging assembly	4.5	3.9
	1	8006-9017	NASNet® CS bottom rigging assembly	4.8	4.2
	1	8006-9015	NASNet® CS tether rigging assembly	13	10.4
	2	8006-9016	NASNet® CS top rigging assembly	3.5	3.0
	1	8006-5207	NASNet® MS-B floatation collar	165.5	+92.1 (buoyant)
	1	8006-5400	NASNet® MS lithium - option alkaline	64	30
	Operating frequency	10kHz with a 3kHz spread		Transmitter/receiver beam width	210 degrees
Signalling	Acoustic Digital Spread Spectrum (ADS ²)		Depth rating	4000 msw	
Power output	Programmable 157-196 dB re 1 µPa		Replacement battery options	0114-3626 (lithium)	
Pulse rate	Up to every 1 second range pulse			256-206-000 (alkaline)	

Weights & Dimensions

Operational Battery Life (at 5 second pulse rate)

Base frame complete	Footprint	1500mm diameter	Output power (dB re 1 µPa)	Days (continuous)	
				Alkalkine	Lithium
	Height	2000mm (inclusive of MS unit)	180	173	360
	Weight in air	314kg (inclusive of MS)	181	145	318
	Weight in water	248kg (inclusive of MS)	182	121	294
Flotation complete	Diameter	218mm	183	99	267
	Height	1134mm (inclusive of MS)	184	81	222
	Weight in air	229kg (inclusive of MS)	185	67	185
	Weight in water	-62kg buoyant (inclusive of MS)	186	54	154
			187	44	112
			188	35	88
Tether	Length	10m-30m (dependent on requirement)	189	28	62
			190	23	43

Smart Solutions

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