

# Navigation Controller Unit (NCU)



The Type 8020 Navigation Controller Unit (NCU) forms part of a Data Fusion Engine, a 'one-box' solution designed to meet the complete on-board requirements of any acoustic operation.

The NCU is the interface between the in-water acoustic instruments, sensors and the Navigation Computer which runs the acoustics positioning software. In addition to accurately time stamping incoming data from external devices such as GPS, the NCU also provides power and communications for ship-borne acoustic transceivers.

A range of hardware interface cards are available for interfacing Sonardyne transceivers and external sensors. By simply plugging these cards into the rear of the unit, the role of the Navigation Controller Unit can be transformed from supporting simple to complex acoustic operations. For certain DP and drilling operations, the NCU can be configured to offer dual and triple redundancy

## Specifications

<b>Product</b>	Navigation Controller Unit (NCU)
<b>Country of origin</b>	UK
<b>Manufacturer</b>	Sonardyne

## Key features

- Interfaces all sensors and acoustic transceivers
- Houses sensor specific interfaces
- Accurate time stamping for next generation tracking methods
- Configurable for dual and triple redundancy
- Provides power and communications to acoustic transceivers

## Specifications

Feature	Type 8020												
<b>Processor</b>	Motorola Coldfire MCF5307 running at 70 MIPS												
<b>Memory</b>	One single Data Rate (SDR) DIMM Socket fitted with 32MB SDRAM												
<b>Motherboard</b>	Proprietary Sonardyne Type 8020-046												
<b>Ports and Connectors</b>	AC mains IEC power connector socket 12 x Interface card connectors												
<b>Power Supply</b>	Auto sensing AC input voltage 100-240V, 50-60 Hz Max current : 0.5A @ 240V, 1A @110V Ave. operating current: 0.32A @ 240V												
<b>Environmental Specifications</b>	<table border="0"> <tr> <td><b>Operating Storage</b></td> <td>0° to 35° C (32° to 95°F)</td> </tr> <tr> <td><b>Relative Humidity</b></td> <td>-40° to 65° C (-40° to 149° F)</td> </tr> <tr> <td><b>Shock</b></td> <td>20% - 80% (non-condensing)</td> </tr> <tr> <td></td> <td>10G acceleration peak to peak</td> </tr> <tr> <td></td> <td>5-17Hz, 0.1" double amplitude displacement</td> </tr> <tr> <td></td> <td>17-640Hz, 1.5G acceleration peak to peak</td> </tr> </table>	<b>Operating Storage</b>	0° to 35° C (32° to 95°F)	<b>Relative Humidity</b>	-40° to 65° C (-40° to 149° F)	<b>Shock</b>	20% - 80% (non-condensing)		10G acceleration peak to peak		5-17Hz, 0.1" double amplitude displacement		17-640Hz, 1.5G acceleration peak to peak
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<b>Safety</b>	Complies with EN61010-1												
<b>EMC</b>	Complies with Immunity & Emission requirements of RN60945												
<b>Dimensions (LxWxH)</b>	384mm (15.1") x 482mm (18.9") x 88mm (3.4")												

