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### Datasheet

## Navigation Computer



#### **Description**

The Type 8026 Navigation Computer forms part of a Data Fusion Engine, a 'one-box' solution designed to meet the complete on-board requirements of any acoustic operation.

The Navigation Computer is a powerful, purpose-built computer that is used in conjunction with the Navigation Sensor Hub (NSH). It has been specifically designed to run Sonardyne's family LBL and USBL software applications.

Features include a front-mounted USB key port for when access to the rear of the unit is restricted by rack mounting or portable configurations.

#### **Key Features**

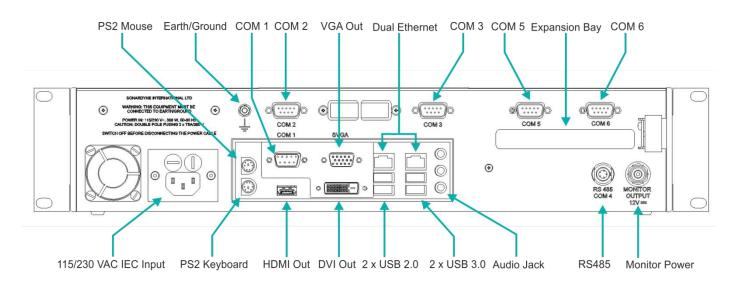
- Intel® Core i7 2600 / 3.4 GHz processor
- Dual SSD Hard Disk
- Dual screen (VGA, DVI or HDMI)
- Shock mounted hard drives
- Ethernet or Serial I/F to NSH
- Front mounted USB key
- DVD±R RW CD-RW
- Front 2.5 inch SATA drive bay
- Front Internal Speaker
- Only 2U high and 384 mm deep



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# Specifications

## Navigation Computer



RAM DDR3 1333 MHz 4 GB DIMM Hard Disk Dual 240 GB SSD  Drives Slimline DVD±R RW CD-RW, 2.5" SATA drive bay Ports 1x VGA, 1x DVI, 1x HDMI dual video output (dual screen or clone screen) 4x USB 2.0 (2x front, 2x rear), 2x USB 3.0 (rear), 5 x RS232 serial ports, 1x RS485 port, 1x keyboard, 1x mouse, 1x speaker, 1x AUX in  Network 2 x 1 Gbps Ethernet Power In Auto sensing ac voltage 115/230 V, 60/50 Hz Max power input 300 W Input current: 1.9 A @ 230 V  Power Out 12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Audio Internal speaker Video Dual screen available by a combination of the DVI, HDMI or VGA ports Environmental Specifications Storage Temperature Relative Humidity Vibration 4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Indeor use, altitude up to 2000 m, pollution degree 2, continuous operation Complies with EN61010-1: 2010			
RAM DDR3 1333 MHz 4 GB DIMM Hard Disk Dual 240 GB SSD  Drives Slimline DVD±R RW CD-RW, 2.5" SATA drive bay Ports 1x VGA, 1x DVI, 1x HDMI dual video output (dual screen or clone screen) 4x USB 2.0 (2x front, 2x rear), 2x USB 3.0 (rear), 5 x RS232 serial ports, 1x RS485 port, 1x keyboard, 1x mouse, 1x speaker, 1x AUX in  Network 2 x 1 Gbps Ethernet Power In Auto sensing ac voltage 115/230 V, 60/50 Hz Max power input 300 W Input current: 1.9 A @ 230 V  Power Out 12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Audio Internal speaker Video Dual screen available by a combination of the DVI, HDMI or VGA ports Environmental Specifications Storage Temperature Power In Relative Humidity Vibration V	Feature		Type 8026
Hard Disk  Dual 240 GB SSD  Drives  Slimline DVD±R RW CD-RW, 2.5" SATA drive bay  Ports  1x VGA, 1x DVI, 1x HDMI dual video output (dual screen or clone screen) 4x USB 2.0 (2x front, 2x rear), 2x USB 3.0 (rear), 5 x RS232 serial ports, 1x RS485 port, 1x keyboard, 1x mouse, 1x speaker, 1x AUX in  Network  2 x 1 Gbps Ethernet  Power In  Auto sensing ac voltage 115/230 V, 60/50 Hz  Max power input 300 W Input current: 1.9 A @ 230 V  Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Audio  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature Storage Temperature Relative Humidity Vibration  4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	Processor		Intel® Core i7 2600/3.4 GHz
Drives  Slimline DVD±R RW CD-RW, 2.5" SATA drive bay  Ports  1x VGA, 1x DVI, 1x HDMI dual video output (dual screen or clone screen) 4x USB 2.0 (2x front, 2x rear), 2x USB 3.0 (rear), 5 x RS232 serial ports, 1x RS485 port, 1x keyboard, 1x mouse, 1x speaker, 1x AUX in  Network  2 x 1 Gbps Ethernet  Power In  Auto sensing ac voltage 115/230 V, 60/50 Hz Max power input 300 W Input current: 1.9 A @ 230 V  Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Audio  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature Specifications  Storage Temperature Relative Humidity Vibration  4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	RAM		DDR3 1333 MHz 4 GB DIMM
Ports    1x VGA, 1x DVI, 1x HDMI dual video output (dual screen or clone screen)	Hard Disk		Dual 240 GB SSD
4x USB 2.0 (2x front, 2x rear), 2x USB 3.0 (rear), 5 x RS232 serial ports, 1x RS485 port, 1x keyboard, 1x mouse, 1x speaker, 1x AUX in  Network  2 x 1 Gbps Ethernet  Auto sensing ac voltage 115/230 V, 60/50 Hz  Max power input 300 W  Input current: 1.9 A @ 230 V  Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Audio  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature Specifications  Storage Temperature Relative Humidity Vibration  4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	Drives		Slimline DVD±R RW CD-RW, 2.5" SATA drive bay
RS485 port, 1x keyboard, 1x mouse, 1x speaker, 1x AUX in  Network  2 x 1 Gbps Ethernet  Auto sensing ac voltage 115/230 V, 60/50 Hz  Max power input 300 W Input current: 1.9 A @ 230 V  Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Audio  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature Specifications  Storage Temperature Relative Humidity Vibration  Vibration  A hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	Ports		1x VGA, 1x DVI, 1x HDMI dual video output (dual screen or clone screen)
Network  Power In  Auto sensing ac voltage 115/230 V, 60/50 Hz  Max power input 300 W  Input current: 1.9 A @ 230 V  Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature  Storage Temperature  Power Out  Operating Temperature  Storage Temperature  Power Out  Audio  Dual screen available by a combination of the DVI, HDMI or VGA ports  Oto 55°C (32 to 131°F)  Power Out  Internal speaker  Oto 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out  Internal speaker  Out of 55°C (-4 to 131°F)  Power Out of 55°C (-4			4x USB 2.0 (2x front, 2x rear), 2x USB 3.0 (rear), 5 x RS232 serial ports, 1x
Power In  Auto sensing ac voltage 115/230 V, 60/50 Hz  Max power input 300 W  Input current: 1.9 A @ 230 V  Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature  Storage Temperature  Power Out  Operating Temperature  Storage Temperature  Power Out  Operating Temperature  Operating Temperature  Power Out  Operating Temperature  Power Out  Operating Temperature  Power Out  Operating Temperature  Power Out  Operating Temperature  Operating Temperature  Power Out  Operating Temperature  Operating T			
Max power input 300 W Input current: 1.9 A @ 230 V  Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Audio  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature Storage Temperature Pelative Humidity Vibration  Vibration  A hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	Network		2 x 1 Gbps Ethernet
Input current: 1.9 A @ 230 V  Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Audio  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature Specifications  Storage Temperature Relative Humidity Vibration  4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz  Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz  Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz  Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	Power In		
Power Out  12 V dc (Sonardyne 17" monitor) 5 A, 60 W max  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental Operating Temperature O to 55°C (32 to 131°F)  Specifications Storage Temperature Relative Humidity Vibration			Max power input 300 W
Audio  Internal speaker  Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature Specifications  Storage Temperature Relative Humidity Vibration  Vibration  A hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010			Input current: 1.9 A @ 230 V
Video  Dual screen available by a combination of the DVI, HDMI or VGA ports  Environmental  Operating Temperature Specifications  Storage Temperature Relative Humidity Vibration  4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	Power Out		12 V dc (Sonardyne 17" monitor) 5 A, 60 W max
Environmental Operating Temperature 0 to 55°C (32 to 131°F)  Specifications Storage Temperature Relative Humidity Vibration 4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz  Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz  Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz  Intended Use Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	Audio		Internal speaker
Specifications  Storage Temperature Relative Humidity Vibration  4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use  Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Complies with EN61010-1: 2010	Video		Dual screen available by a combination of the DVI, HDMI or VGA ports
Relative Humidity Vibration Vibratio	Environmental	Operating Temperature	0 to 55°C (32 to 131°F)
Vibration  4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g²/Hz Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation Safety  Complies with EN61010-1: 2010	Specifications	Storage Temperature	-20 to 55°C (-4 to 131°F
Successive sinusoidal sweeps up to 0.85 g, rack mounted, 5 to 100 Hz Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation Safety Complies with EN61010-1: 2010		Relative Humidity	
Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz Intended Use Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation Safety Complies with EN61010-1: 2010		Vibration	4 hour random test (w/o resonant dwells) 10 to 1000 Hz at 0.002 g <sup>2</sup> /Hz
Intended Use Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation  Safety Complies with EN61010-1: 2010			
Safety Complies with EN61010-1: 2010			Successive sinusoidal sweeps in an angled position, up to 0.4 g, 5 to 100 Hz
	Intended Use		Indoor use, altitude up to 2000 m, pollution degree 2, continuous operation
EAAC Complian with Improvise & Emission positionary of FN 40045	Safety		Complies with EN61010-1: 2010
Compiles with immunity & Emission requirements of EIN 00945	EMC		Complies with Immunity & Emission requirements of EN 60945
Dimensions (LxWxH) 384 x 482 x 88 mm (15.1 x 18.9 x 3.4")	Dimensions (LxWxH)		384 x 482 x 88 mm (15.1 x 18.9 x 3.4")
Weight 7.5 kg	Weight		7.5 kg



