

C-Mariner Inertial Navigation System

Following a multi-year co-operative venture with Honeywell Aerospace, Oceanering can now deliver an INS system using the same hardware trusted by airlines around the world.



FEATURES

1 nm/hr navigation quality INS

GNSS quality parameter driven integration

0.05 deg heading accuracy (1 sigma)

During its development period, the original aircraft environment software was adapted to perform optimally in the harshest marine conditions. This was accomplished while maintaining the rigorously-tested, FAA-approved hardware, for which safety and reliability are paramount. The C-Mariner INS uses Honeywell's Ring Laser Gyro technology with a proven track record of 3.6 billion hours in safety of life applications.

Available C-Mariner software offerings:

- » CM300 Heading, pitch and roll
- » CM400 Heading, pitch, roll and heave
- » CM600 Heading, pitch, roll, heave, position and velocity

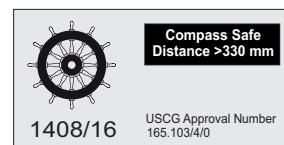
C-Mariner uses industry standard data formats for input and output, with capability to generating custom outputs as an option. A wide variety of interface options and displays are available, including legacy repeater drivers.

	C-Mariner [* All Accuracies 1 Sigma]	CM145 Interface
Heading deg sec lat*	0.05 deg - resolution 0.001 deg	
Pitch and roll	0.01 deg - resolution 0.01 deg	
Heave - cm400, cm600:	Greater of 5 cm or 5%	
Free inertial drift	1 nm/hr	
Alignment	Alignment with true north: 4 min (full accuracy: 15-30 min)	
Dimensions (L x W x H)	6.43 x 6.52 x 6.28 in / 16.3 x 16.6 x 16 cm	13 x 19 x 5.25 in / 33 x 48 x 13.3 cm
Weight	9.3 lb / 4.2 kg	12 lb / 5.4 kg
Voltage	24 V DC (nominal) 22-36 V DC (start up) / 18-36 V DC (operating)	24 V DC
Power (maximum)	28 W	45 W
Temperature range	-40°F to 158°F / -40°C to 70°C	32°F to 158°F / 0°C to 70°C
Shock (operational)	20 g (maximum)	
Vibration	2.2 g sine	
IP rating	62	65
Interface	Ethernet RS-422 for 1 PPS	2 x local ethernet ports (TCP/UDP) 8 x bidirectional serial ports 2 x TTL for 1 PPS inputs
Aiding	GNSS, Acoustic	
Inputs	GGA, VTG, GST, ZDA, VHW	As C-Mariner
Outputs	INZDA, INGGA, INVTG, INGST, HETHS, HEHDT, HEROT, TSS1 for (pitch, roll, heave), PHSTS custom status message	Selectable on all serial ports
Maximum data rate	50 Hz	50 Hz
Setup/control	Internal web browser application, accessible from local network	Accessible from local network
Indicators	None	4 in touchscreen display, power LEDs
Export license not required	ECCN 7A994*	

*Control by U.S. Department of Commerce list "AT" Column 1 and General Prohibitions 4-10.

Options

- » Dual GNSS aiding
- » Automatic lever arm calibration
- » USBL, SSBL, and LBL acoustics



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