

Teledyne CDL

MINIPOS3

RING LASER GYRO

The MiniPOS3 is a full Inertial Navigation System (INS) providing highly accurate Heading, Pitch and Roll alongside multiple aiding options including USBL, LBL, DVL and GPS to provide a positioning solution that eliminates almost all of the inherent noise and availability issues of traditional positioning systems. Developed from the successful MiniPOS2 system the addition of USBL/LBL aiding technology provides a system that is capable of providing high accuracy aided positioning for most subsea construction, inspection and survey related tasks for ROV and AUV.

The MiniPOS3 can also form an integral part of a MWSK (Mid Water Station Keeping) system fusing INS, DVL and USBL to produce a highly stable INS aided solution feeding precise position, acceleration and rotation information directly to the closed loop control system on the ROV/AUV at update rates of up to 50Hz.

MiniPOS3 is hardware independent and can work with any USBL or LBL system and a variety of topside software packages.



PRODUCT FEATURES

- Full INS Capability
- RLG Optical Technology – No Moving Parts
- High Accuracy Heading, Pitch and Roll
- Low Noise, High Update Rate Solution
- USBL, LBL, GPS and DVL Aiding
- Proven Mid Water Station Keeping Capability



TELEDYNE CDL
Everywhere you look™

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TECHNICAL SPECIFICATIONS

Performance:

	Standard T16 IMU	High performance T24 IMU
Heading accuracy	0.169 deg sec lat	0.028 deg sec lat
Pitch and roll accuracy	0.028 deg	0.028 deg
Heave accuracy	5cm or 5%	5cm or 5%

Physical Characteristics:

Dimensions*	177mm dia x 268mm high (182 x 182mm square base)	233mm x 310mm (233 x 233mm square base)
Weight in Air/Water*	9.8kg/2.3kg	21kg/8kg
Connectors	1 x 13 pin, 2 x 8 pin Burton (standard)/others on request	

Position Accuracy:

Free inertial drift	<5 Nautical mile per hour	<1 nautical mile per hour
DVL aiding	0.4% of distance travelled	0.1% of distance travelled
USBL/LBL	>3 times improved USBL/LBL	>3 times improved USBL/LBL

Operating Range/Environment:

Heading	+/- 360 deg
Pitch/roll	+/- 90 deg / or +/- 180 deg
Max rotation rate	>300 degrees
Heave	+/- 10m
Operating temperature	-10 to 55°C
Depth rating	3000m (standard), 4000m – 6000m (options)

Interface:

RS232/RS422	4 inputs/ 4 outputs
Sensor input	USBL, LBL, GPS, DVL and depth
Baud rates	Up to 115.2 kbaud
Data output	Up to 50Hz
Power supply	20 – 30VDC, 100 – 260VAC
Power consumption	20 – 35W (configuration dependant)

Specifications subject to change without notice.
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