

Honeywell

LASEREF VI - FOR HELICOPTERS

Inertial navigation solution for helicopters



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The civil certified Laseref VI Inertial Reference System (IRS) has been tailored to meet the unique needs of the helicopter marketplace providing the high accuracy with lowest cost of ownership. The Laseref VI IRS is specifically targeted at applications where GNSS denied, RNP AR, or high bandwidth SATCOM is desired.



Characteristics

Attitude	0.1 degree
Heading	0.4 degree
Position (inertial)	2 NMPH
Position (hybrid)	25 Meters (Typical 12 Meters)
Hybrid position coasting performance	>20 minutes @RNP 0.3 NM
Velocity (inertial)	8 knots
Velocity (hybrid)	0.25 knots
Certification standards	DO-254 Level A DO254A AC20-138D FAR 121 Appendix G RTCA/DO-160G, Unknown helicopter vibration
Technical standard order (TSO)	C-3e, C-4c, C-5f, C-6e, and C-196a
In-service reliability	>50,000 MTBF
Interfaces	ARINC-429 I/O
Size	6.5" x 6.4" x 6.4" 16.51 cm x 16.25 cm x 16.25 cm
Weight with mounting tray	9.6 lbs (9.1lbs IRU) 4.35 kg (4.12 kg IRU)
Power (typical)	20 watts
Cooling	Passive
Accelerometer sensor technology	Quartz
Gyro sensor technology	Digital ring laser
Alignment	1 - Align stationary (Normal or Fast align) 2 - Aligning in Motion: • Quick Dispatch (align enroute) • Dispatch from a moving platform (shipboard, oil rigs)
Aircraft configurable options	Lever arms for CG Offsets Lever arms for GPS Tunable Output Filters Several I/O configuration options Normal or Fast alignment options
Export controlled category	ECCN 7A103.a

Why Honeywell

With the recognition of GNSS navigation being denied through intentional or unintentional interference, and the growing need for 100% availability Required Navigation Performance (RNP), Authorized Required (AR) helicopter marketplace needs an autonomous GNSS augmentation source of navigation.

Honeywell has developed a Laseref VI Inertial reference system that specifically has been tailored to meet the unique needs of the helicopter market place including optimized alignment for quick dispatch, full helicopter qualification levels, pointing accuracy to support high bandwidth SATCOM, RNP AR operations even in GNSS denied environments.

Key Benefits

- Quick dispatch available after 1 min of stationary alignment.
- Highly accurate to accommodate high bandwidth SATCOM needs.
- 100 % availability of RNP 0.3 and 0.1 for landing and takeoff scenarios including when satellite navigation has been interrupted (GNSS denied).
- High accuracy and bandwidth for modern fly by wire helicopters.
- Customer tailored installation such as lever arm corrections.

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