



## IMU15™ MEMS INERTIAL MEASUREMENT UNIT (IMU)

# COMPACT SIZE, PROVEN PERFORMANCE

### Incorporating proven, precision, micro electro-mechanical systems (MEMS), gyroscopes and accelerometers

The Collins Aerospace IMU15™ MEMS inertial measurement unit (IMU) is a compact six-degree-of-freedom inertial measurement unit providing precise three-axis outputs of angular rate, acceleration and temperature. Our product has been designed specifically to meet the growing demand from high-end commercial and industrial market applications for an industrial grade non-licensable IMU.

In line with our constant drive for innovation, IMU15 incorporates the latest technology in a very small package, while retaining best-in-class performance and reliability. Our unique pedigree and world-class expertise has enabled an industrial grade IMU under 1 cubic inch in volume.

IMU15 uses our world-class MEMS inertial sensors, integrated and calibrated using our in-house, state-of-the-art test facility.

Collins Aerospace has a long and respected heritage in the design and development of inertial sensors.



### KEY FEATURES

- FOG performance 6-DOF MEMS inertial measurement unit
- Bias instability and random walk angular –  $\leq 0.6^\circ/\text{hr}$ ,  $0.05^\circ/\sqrt{\text{hr}}$  linear –  $<0.5\text{mg}$ ,  $<0.6\text{m/s}/\sqrt{\text{hr}}$
- Non-ITAR
- Non-licensable
- Compact and lightweight – 58.0 x 59.0 x 36.0 H (mm), 200 g
- Internal power conditioning to accept 4.75 V to 5.25 V input strike voltage
- RS422 interfaces
- $-40^\circ\text{C}$  to  $75^\circ\text{C}$  operating temperature range
- RoHS compliant
- In-house manufacture from MEMS fabrication to IMU calibration

