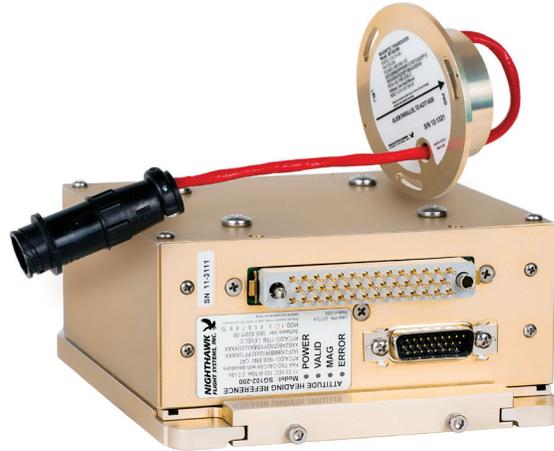


SG102 AHRS



The SG102 (MOD2) Attitude Heading Reference System (AHRS) has an initialization time that is 3X faster than the original. It also now comes with selectable low and high-speed ARINC 429 outputs, which allows for additional interface options with radar systems, satellite communicator antennas and other avionics.

It is an affordable, solid-state replacement for older directional gyros in your piston, turboprop, jet aircraft, or helicopter. With an MTBF of more than 10,000 hours, the SG102 (MOD2) is the most practical way to dramatically increase the reliability of your aircraft's compass system.

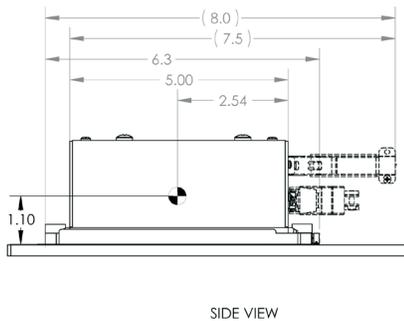
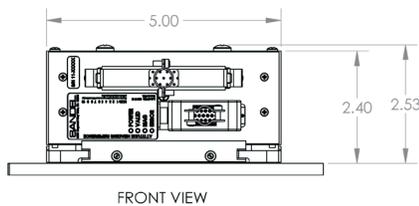
NIGHTHAWK 
FLIGHT SYSTEMS, INC.

Fly Safe.

SG102 AHRS

SG102-000: Piston A/C
 SG102-100: Turbine A/C
 SG102-200: Helicopter

- Certified for primary heading reference and secondary attitude
- Solid state, plug-compatible upgrade for the Bendix/King KG102A directional gyro
- Compatible with all common directional gyro interfaces
- Pitch and roll output for auxiliary applications requiring stabilization



Dimensions and specifications subject to change without notice.

Weight
 SG102-000/100/200 2.4 lbs (1.08 kg) including connectors
 MT102 Magnetic Transducer 0.61 lbs (0.28 kg)
 SG102 Mounting Base 0.61 lbs (0.28 kg)

Dimensions
 SG102-050/150/250 5.0 in x 6.3 in x 2.53 in (12.7 cm x 16 cm x 6.4 cm)
 MT102 Magnetic Transducer 3.4 in diameter, 1.0 in height (8.6 cm x 2.5 cm)
 SG102 Mounting Base 5.0 in x 6.1 in x 0.3 in (12.7 cm x 15.5 cm x 0.8 cm)

Power Requirements 11-33VDC, 30W maximum, 15W nominal

Cooling Requirements None

Operating Environment
Temperature -55° C to +70° C
Altitude +55,000 feet maximum

Performance
Initialization Time Approximately 1 minute nominal
Accuracy +/- 1 degree magnetic heading

Body Rate Limits +/- 250 °/sec
MTBF >10,000 hours, calculated

Certification Basis
 SG102-050/150/250 TSO C4c, Bank and Pitch Instruments
 TSO C6d, Direction Instrument, Magnetic (Gyroscopically Stabilized)
 EASA ETSO, C4c, C64
 RTCA/DO-178B, Software Level C
 RTCA/DO-160E Env. Cat.

SG102-000: [A2F2X]BBB[S(LM)H(R)]XWXXXXBZAB[ZW][YY]

M[A3J33]XXAX

SG102-100: [A2F2X]BBB[H(R)R(BB1CC1)]XWXXXXBZAB[ZW][YY]

M[A3J33]XXAX

SG102-200: [A2F2X]BBB[R(G)U2(FF1)]XWXXXXBZAB[ZW][YY]

M[A3J33]XXAX

MT102 Magnetic Transducer TSO C6d, Direction Instrument, Magnetic (Gyroscopically Stabilized)
 EASA ETSO, C6d
 RTCA/DO-160E Env. Cat. [A2F2X]BBB[H(RP)R(BB1CC1EE1GJ)U2(FF1)]
 XWXXXXBXXX[ZW][YY]M[A3J33]XXAX
 RTCA/DO-178B, Software Level C

Interfaces
Magnetic Heading ARINC 407 (XYZ Synchro), Stepper Motor (KG 102A), ARINC 429 Low or High speed, RS-232

Pitch and Roll ARINC 429 Low or High speed*

* Not certified for primary attitude. Pitch and roll data for auxiliary applications only, including reversionary attitude