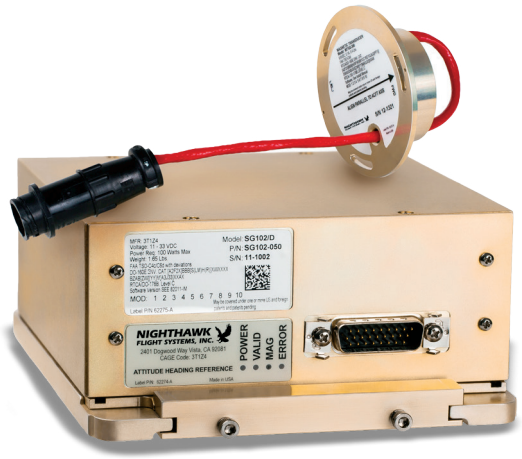
SG102/D AHRS



D, for Digital. The SG102/D Attitude Heading Reference System (AHRS) is identical to the SG102 (MOD2) without the analog interfaces. It's lighter in weight and lighter in price. The SG102/D is designed for non-KG102 equipped aircraft and ideal for new equipment installs.

With an improved initialization time of one minute, it's 3X faster than the original SG102. It also comes with a selectable low- and high-speed ARINC 429 output, which allows for additional interface options such as radar systems, satellite communicator antennas and FLIR stabilization.

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SG102/D AHRS

SG102/D-050: Piston A/C

SG102/D-150: Turbine A/C

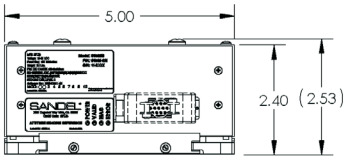
SG102/D-250: Helicopter

• Certified for primary heading reference and secondary attitude

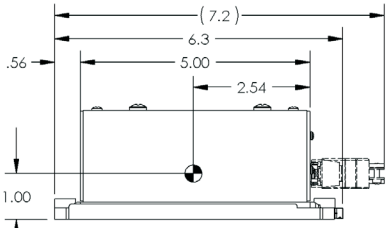
• 1 minute initialization time

• Compatible with digital heading interfaces

• Pitch and roll output for auxiliary applications requiring stabilization



FRONT VIEW



SIDE VIEW

Weight	
SG102-050/150/250	1.65 lbs (0.75 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 @ nominal 8 watts Startup current:Approximately 18 watts 1 minute
Cooling Requirements	None
Operating Environment	
Temperature	-55° C to +70° C
Altitude	+55,000 feet maximum
Performance	
Initialization Time	Approximately 1 minute nominal
Accuracy	Magnetic heading: +/- 2 degrees nominal Pitch & Roll: 0.25 degrees typical
Body Rate Limits	+/- 250 º/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. SG102-050: [A2F2X]BBB[S(LM)H(R)]XWXXXXBZAB[ZW][YY] M[A3J33]XXAX SG102-150: [A2F2X]BBB[H(R)R(BB1CC1)]XWXXXXBZAB[ZW][YY] [A3J33]XXAX SG102-250: [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] [A3J33]XXAX RTCA/DO-178B, Software Level C
Interfaces	
ARINC 429	Single output, Low or high speed Magnetic Heading, Pitch & Roll*, Body Acceleration
RS232	Stormscope Format

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

Dimensions and specifications subject to change without notice.

Vista, California USA 1.760.727.4900 nighthawkfs.com

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