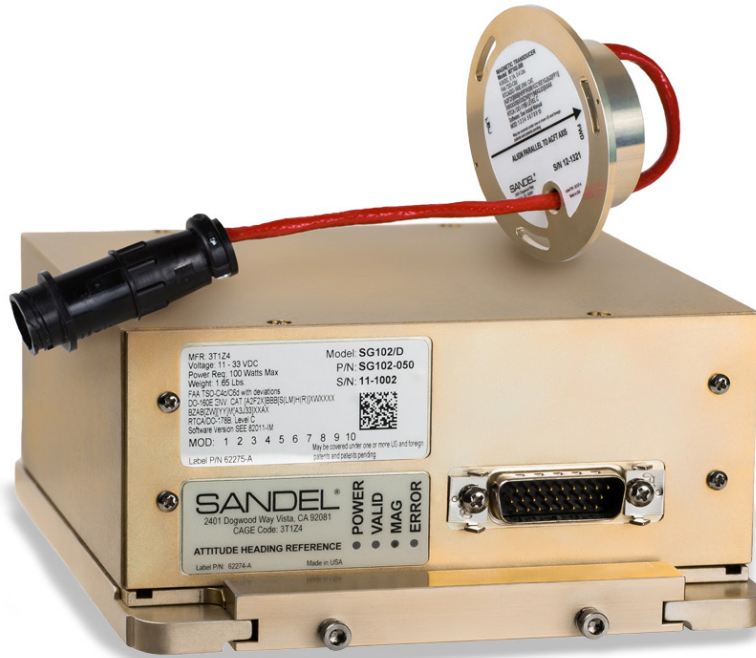


# SG102/D AHRS



D, for Digital. The Sandel 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.

See what's next

# SANDEL.

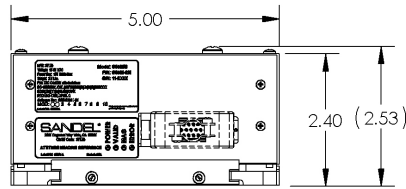
# SG102/D AHRS

SG102/D-050: Piston A/C

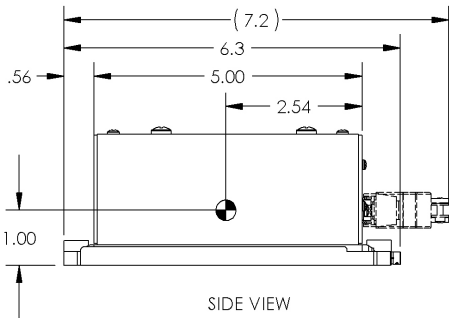
SG102/D-150: Turbine A/C

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 %/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)]XWXXXXXBZAB[ZW][YY]

M[A3J33]XXAX

SG102-150: [A2F2X]BBB[H(R)R(BB1CC1)]XWXXXXXBZAB[ZW][YY]

M[A3J33]XXAX

SG102-250: [A2F2X]BBB[R(G)U2(FF1)]XWXXXXXBZAB[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

*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.