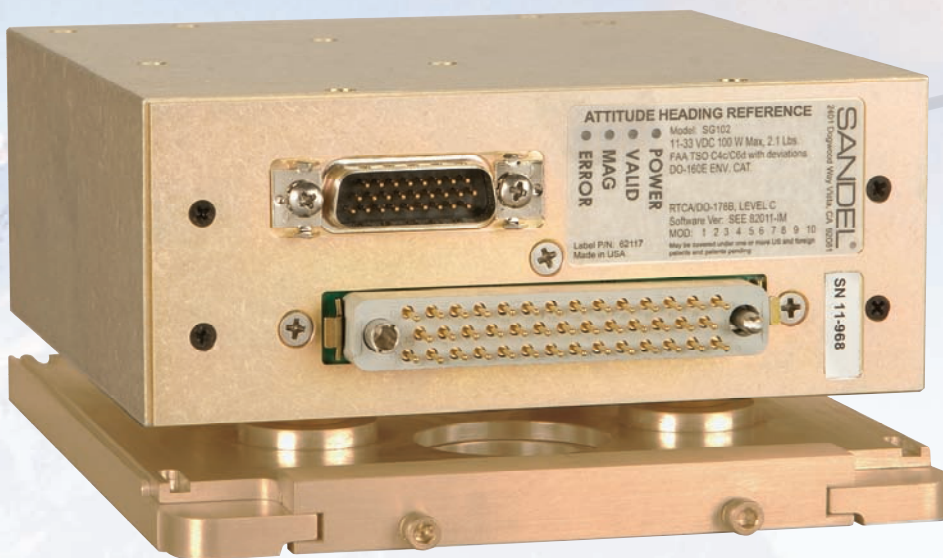


SANDEL®

SG102 AHRS Replacement DG for Helicopters



KEY FEATURES

- Certified for primary heading reference
- Compatible with all common directional gyro interfaces
- Pitch and roll output for auxiliary applications requiring stabilization
- >10,000 Hours MTBF, Calculated

A solid-state upgrade for electromechanical directional gyros, the Sandel SG102 Attitude Heading Reference System (AHRS) is now available in a ruggedized High-Vibration version designed for the tough helicopter environment. With an MTBF of over 10,000 hours, the SG102 is an affordable way to dramatically increase the reliability of your helicopter's compass system.

Plug compatible with the KG 102A directional gyro, the SG102 is ideally suited for upgrading existing Bendix/King® KCS 55A compass systems. Multiple heading formats (XYZ, ARINC 429 and RS-232) are also supported to allow upgrading of other directional gyros or interfacing with Sandel's SN3500 and SN4500 Primary Navigation Displays.

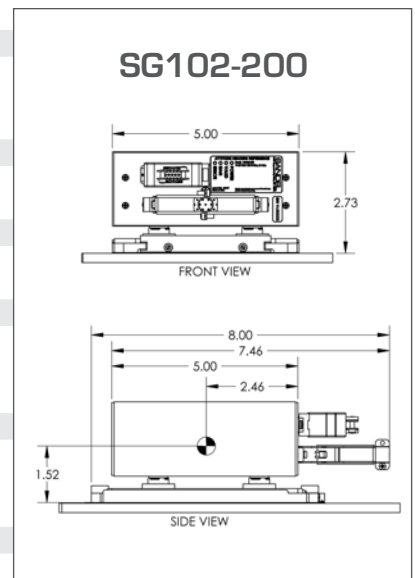
The SG102 system also includes a Sandel-designed solid-state sealed magnetic transducer (magnetometer) for stabilized magnetic heading. Utilizing the latest MEMS sensor technology, the compact SG102 weighs just over two pounds and provides size and weight savings over traditional mechanical gyros.

Offering a superior approach to inertial reference, the vibration-resistant SG102 AHRS continues the Sandel tradition of innovative, modular solutions that enhance reliability while saving you time and money.

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SPECIFICATIONS: SG102-200 AHRS High-Vibration Version for Helicopters

Weight	
SG102-200 AHRS	2.2 lbs (1.0 kg)
MT102 Magnetic Transducer	0.4 lbs (0.18 kg)
SG102 Mounting Base	0.6 lbs (0.27 kg)
Dimensions	
SG102-200 AHRS	5.0 in x 5.4 in x 2.4 in (12.7 cm x 13.7 cm x 6.1 cm)
MT102 Magnetic Transducer	3.4 in diameter, 1.0 in height (8.6 cm x 2.4 cm)
SG102 Mounting Base	5.0 in x 6.1 in x 0.3 in (12.7 cm x 15.5 cm x .9 cm)
Power Requirements	
	11-33VDC, 100W maximum, 15W nominal 5 Amps maximum current draw during startup
Inverter Output	
	26VAC, 400Hz, 5VA (no external inverter required)
Cooling Requirements	
	None
Operating Environment	
Temperature	-55° C to +70° C
Altitude	+55,000 feet maximum
Performance	
Initialization Time	5 minutes at 15° C
Accuracy	+/- 1 degree magnetic heading
MTBF	
	>10,000 hours, calculated
Certification Basis	
SG102-200 AHRS	TSO C4c, Bank and Pitch Instruments TSO C6d, Direction Instrument, Magnetic (Gyroscopically Stabilized) RTCA/DO-160E Env. Cat. [A2F2X]BBB[R(G)U2(FF1)]XWXXXBZAB[ZW][YY]M[A3J33]XXAX RTCA/DO-178B, Software Level C
MT102 Magnetic Transducer	TSO C6d, Direction Instrument, Magnetic (Gyroscopically Stabilized) RTCA/DO-160E Env. Cat. [A2F2X]BBB[H(RP)R(BB1CC1EE1GJ)U2(FF1)]XWXXXBXXX[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-speed, RS-232
Pitch and Roll	ARINC 429 Low-speed* *Not certified for display of attitude. Pitch and roll data for auxiliary applications only.



For further information and pricing,
see your Sandel dealer or contact Sandel Avionics, Inc.:

Sandel Avionics, Inc.

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