SG102 AHRS



The Sandel SG102 (MOD2) Attitude Heading Reference System (AHRS) has an initialization time that is 3Xs faster then the previous version. 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.



SG102 AHRS

(11002)		
Certified for primary heading reference and	Weight SG102-000/100/200	2.4 lbs (1.08 kg) including connectors
secondary attitude	MT102 Magnetic	0.4 lbs (0.18 kg)
	Transducer	-
Solid state, plug-compatible upgrade for	SG102 Mounting Base	0.6 lbs (0.27 kg)
the Bendix/King KG102A directional gyro	Dimensions SG102-000/100/200	5.0 in x 6.3 in x 2.53 in (12.7 cm x 15.9 cm x 6.1 cm)
Compatible with all common directional	MT102 Magnetic	3.4 in diameter, 1.0 in height (8.6 cm x 2.4 cm)
gyro interfaces	Transducer	
 Pitch and roll output for auxiliary 	SG102 Mounting Base	5.0 in x 6.1 in x 0.3 in (12.7 cm x 15.5 cm x .9 cm)
applications requiring stabilization	Power Requirements	11-33VDC, 30W maximum, 15W nominal
	Inverter Output	26VAC, 400Hz, 5VA (no external inverter required)
	Cooling Requirements	None
	Operating Environment <i>Temperature</i>	-55° C to +70° C
	Altitude	+55,000 feet maximum
	Performance	
	Initialization Time	Approximately 1 minute nominal
	Accuracy	+/- 1 degree magnetic heading
FRONT VIEW	Body Rate Limits	+/- 250 °/sec
	MTBF	>10,000 hours, calculated
	Certification Basis SG102-000/100/200	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
SIDE VIEW	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

