GEOSCANNERS
advanced survey systems



DAB-602

The DAB-602 is a dual antenna splitter for antennas compatible with GSSI SIR® systems. It makes possible to operate one-channel radars in bistatic mode with one antenna transmitting and the second receiving and vice versa. The toggling between the two modes is done with the aid of a switch button connected to the unit.

Electrical Specifications

TX1 Transmitting Power Consumption	1.44 W
TX2 Transmitting Power Comsumption	480 mW
TX Trigger Input Insertion Loss at 900 MHz	-0.12 dB
TX Trigger Input V.S.W.R at 900 MHz	1.15
TX Trigger Input -3 dB Bandwidth	3 GHz
Maximum TX Peak Voltage	+350 V
Switching Time to ON Status	20 mS
Switching Hysteresis to OFF Status	400 mS
Survey Wheel DC power Output *	5 V +/- 0.2 up

* The current consumption of the survey wheel encoder attached to this output should not exceed 200mA due to SIR-3000 output limitations, otherwise it supports up to 1A output

Mechanical Specifications

Dimensions (LxWxH) mm/inch *	110x105.9x45.8 (mm) / 4.3x4.2x1.8 (inch)
Weight Kg/Lbs	0.2 kg / 0.44 Lbs
Ingress Protection Rating	IP51

* The length does not include the cable which is 300mm/11.8 inches long

Environmental Specifications

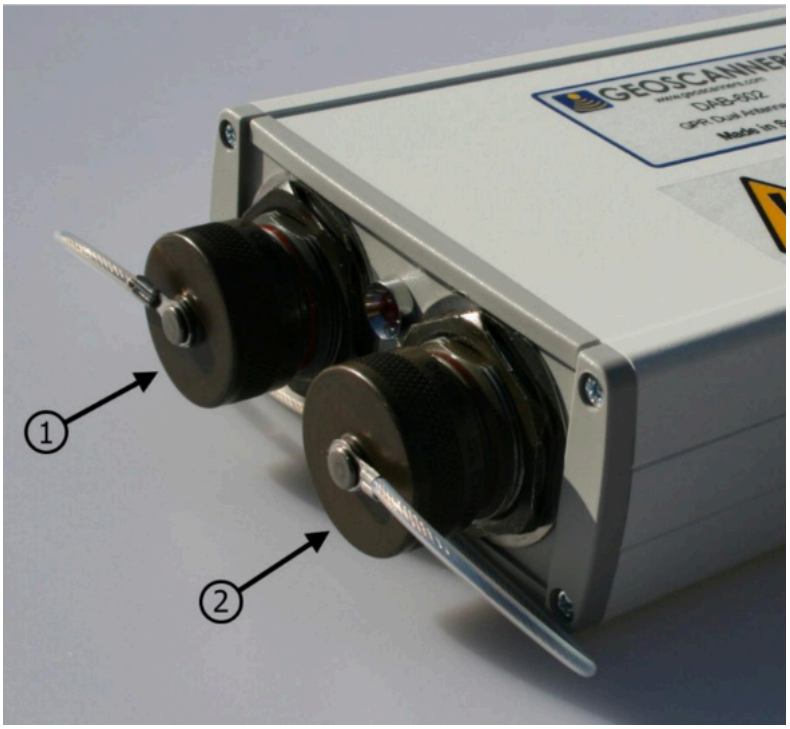
Maximum Temperature °C / °F	+40 °C / +104 °F
Minimum Temperature °C / °F	-10 °C / +14 °F
Maximum Humidity (non-condensing)	96% RH
RoHS Compliant	Yes!

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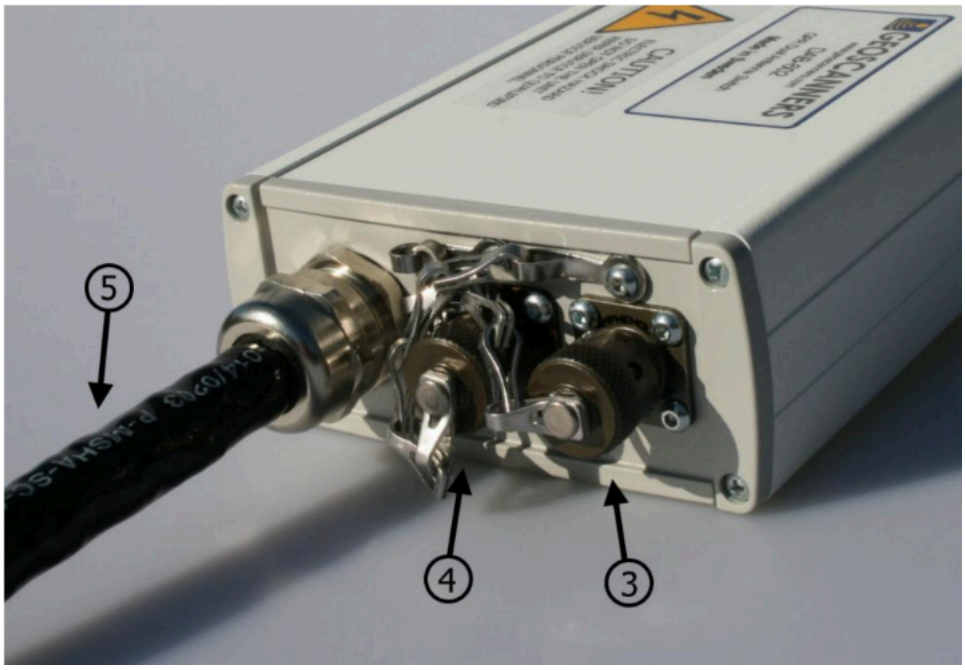
DAB-602 Top View



DAB-602 Front

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Operating Instructions

1. Attach the control cable (5) from the DAB-602 to the radar unit.

2. Attach the control cable from the antenna with TX1 active as a default to input connector (2).

3. Attach the control cable from the antenna that will be operating with TX2 active to the connector (1) on the dual antenna splitter.

4. The LED in the front panel of the unit should be lit now. Now the antenna connected to output (2) is receiving and the antenna connected to output (2) is transmitting. Turn on the radar unit and proceed with the survey.

5. A marker button must be connected to input (4) in order to be able to toggle the channels. Pressing once the marker button will toggle the outputs and the LED will go off indicating that now output (1) is transmitting and output (2) is receiving. Pressing the marker button connected to the unit again will toggle the unit back into the default condition.

6. A survey wheel encoder can be attached to the antenna connected to output (3) or alternatively to input (6). It is not recommended to connect two survey wheels simultaneously, conflicts may occur and the recorded position and distance most likely will be wrong.

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7. The transmitting antenna connected to the output (1) of the DAB-602 can be hot unplugged. That means it is not required to turn off the radar to switch between the modes. It is recommended to stop the acquisition though, so no voltage spikes are generated at the radar control output.

8. Please pay attention to the fact that if the cables going to the antennas or the antennas are different then the offset or signal position must be adjusted accordingly every time the unit toggles. If the antennas are similar and the cables lengths too then most probably no offset adjustment will be required.

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