



SBD-ANT-12GGGL

High performance ruggedized survey mount GNSS antenna

The SBD-ANT-12GGGL features a distinctive high performance quad-feed element, out-of-band filter, limiter, and a high reliability low noise (1.4dB) high gain (43dB) LNA, specifically designed for high-precision geodetic-grade applications, including reference stations, survey, ground, marine, portable and aviation.

The SBD-ANT-12GGGL receives L1, L2 and L5 GNSS frequencies and offers combined GPS + GLONASS + Galileo + BeiDou signal reception. Customers can use the same antenna for GPS only, dual- or triple-constellation applications to increase flexibility and reduce equipment costs.

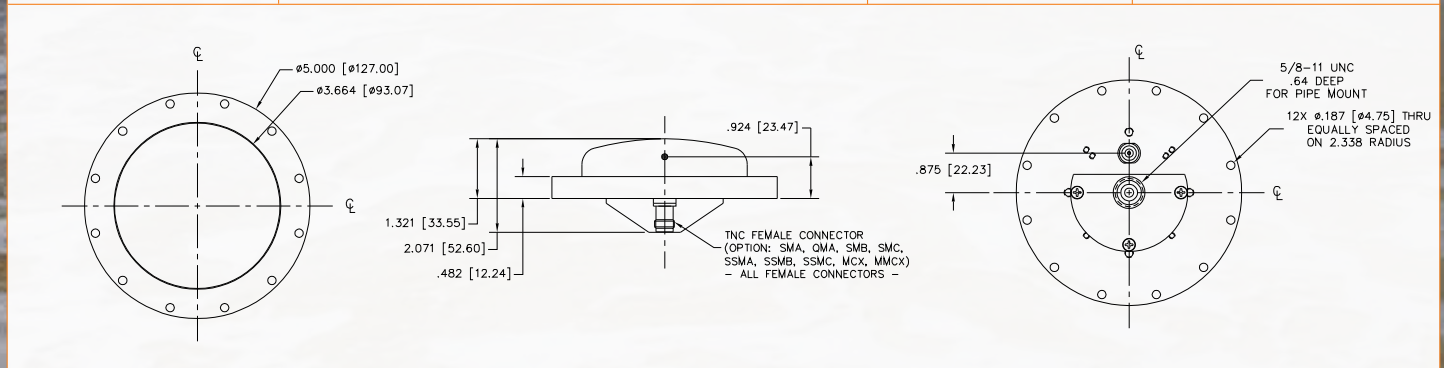


SBD-ANT-12GGGL specifications

Specifications are subject to change without prior notification.

Electrical	L5 GPS E5, E5a, E5b, Galileo L5 IRNSS	L2 GPS B2 Compass	L2 Glonass E6 Galileo B3 Compass	OmniSTAR/L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 Glonass
Frequency	1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 12 MHz	1227.60 ± 12 MHz 1207.14 ± 10 MHz	12421 - 1252 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10 MHz	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	1598 - 1609 MHz
Radiation pattern	Hemispherical					
Polarization	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP
VSWR	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Antenna gain (dBic)						
90° Above horizon (top)	+1.9	+3.7	+4.1	+4.4	+5.6	+6.2
15° Above horizon	-4.5	-3.3	-3.0	-4.5	-3.5	-3.0
20° Above horizon	-3.6	-2.5	-2.2	-3.6	-2.6	-2.1
25° Above horizon	-2.7	-1.6	-1.3	-2.7	-1.6	-1.1
30° Above horizon	-2.3	-1.1	-0.8	-1.8	-0.7	-0.2
70° Above horizon	+1.2	+2.9	+3.4	+3.6	+4.8	+5.4
Beam width (3dBic)	95 Deg.	80 Deg.	80 Deg.	80 Deg.	80 Deg.	80 Deg.
Axial ratio	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB
Multipath rejection (RHCP/LHCP)						
90° Above horizon (top)	23 dB	23 dB	23 dB	23 dB	23 dB	23 dB
0° Above horizon	19 dB	19 dB	19 dB	19 dB	19 dB	19 dB
15° Above horizon	19 dB	19 dB	19 dB	19 dB	19 dB	19 dB
25° Above horizon	17 dB	17 dB	17 dB	17 dB	17 dB	17 dB
Lighting protection	DC Grounding					
LNA gain	42 dB	42 dB	42 dB	42 dB	42 dB	42 dB
LNA noise figure (with filter)	2.6 dB	2.6 dB	2.6 dB	2.6 dB	2.6 dB	2.6 dB
LNA P1dB Out	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm
LNA DC power	(3.3-24)V / <50mA					
Power handling	3 watt CW (with limiter)					

Mechanical	Environmental
Size	Temperature
Diameter: 5.00 in. (127.0 mm) Height: 1.32 in. (33.55 mm)	-67 °F to +185 °F (-55 °C to +85 °C) 70,000 ft.
Weight	Vibration
20.0 oz. (567 g)	> 30 G's Hermetically sealed
Finish	Federal & Military specifications
Base: Hard black anodize per Mil-A-8625F, Type III, Class 2 Radome: Skydrol resistant polyurethane enamel per FED-STD-595B	FAA TSO-C144, DO-160D, Do-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810 and SAE J1455
Material	Acceptance test procedure
6061-T6 aluminum alloy base Composite radome, impact, abrasion, UV, solvent, Skudrol resistance and fire retardant	ATP-GPS-L1L2-100
Connector	
TNC Female (option: SMA, QMA, SMB, SMC, SSMA, SSMB, SSMC, MCX, MMCX)	



Contact us

For more specific information concerning how we can assist your organization's needs, please call +31(0)20 636 84 43 or visit our website for more information & all our contact details, www.seabed.nl



Getting to the bottom of things