



2.1GHz-2.7 GHz Bi-Directional Band stop Amplifier





1.0 Introduction

The Navwave Systems Link Guard, NWS-LG-1W, is a compact, high-performance Bi-directional band stop Amplifier delivering one watt (30 dBm) of output power in the range of 2.1-2.7 GHz in the Tx mode and Rx mode it gives an attenuation of 20 dB in the 2.4-2.5 GHz frequency. The intended purpose of the amplifier is designed to provide bandstop function in the interference band in Rx. Designed as an add-on module for the TDD radio, to provide attenuation in the Rx interference band.

The Link Guard supports both transmit (Tx) and receive (Rx) operations autonomously, requiring no external control logic from the host Zigbee/Wi-Fi transceiver. In the transmit direction, the module delivers a robust 1W output to the antenna port, ensuring reliable signal transmission. In the receive direction, the module operates with minimal Gain in the frequency range of 2.1-2.7 GHz and provide attenuation in the interference bands.

Technical specifications for the Link Guarded is provided in the following section.

2.0 Specifications

Sl.No	Parameter	Specifications	Remarks
1.	Operating Frequency	2.1 GHz- 2.7 GHz	
2.	Gain in Tx path	30 dB	
3.	Gain in Rx path (Bypass path)	15 dB -2 dB	Bypass LNA path is available with a gain of -2 dB
4.	1 dB GCP	31.5 dBm	
5.	Input power	5 dBm	For 1 W Output
6.	Damage Input power	8 dBm	Not more than 8 dBm
7.	In/Out Connectors	SMA(F)	
8.	Operating Voltage	5V	
9.	Current consumption	900mA (Max) Tx Less than 10mA Rx	Current Drawn 10 mA in Idle state
10.	In/Out Connectors	SMA(F)	
11.	Power ON Indication	Green LED	
12.	Mechanical Dimensions	70mmx43mmx24mm	LXWXH
13.	In/Out Impedance	50 Ohms	
14.	Power supply interface	Through Feed through and Ground LUG	



Navwave Systems

Ver: V1.0

2.4GHz-2.5GHz Bi-Directional Bandstop Amplifier-1W

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