

Günter Köllner Embedded Development GmbH Am Rain 24 85256 Vierkirchen, Germany

Datasheet

FLARM BOOSTER

The FLARM BOOSTER works as a receive preamplifier but bypasses in transmit mode automatically.

Operation mode is displayed by a red and green LED.

Power can be supplied via attached red/black wire as well as over the RX side coax cable.

A built in filter avoids interferences with out-of-band signals

Technical Data

Connectors

Description	Value
RF connector	SMA female
DC Input ^{(1) (2)}	FLARM connector
	Minus: Shield
	Plus: Center
DC Input ⁽¹⁾	DC cable
	Minus: black
	Plus: red

⁽¹⁾ DC inputs can be used alternatively.

⁽²⁾ Recommended accessories jetvision Bias Tee No. 69400

RF Parameters (typical)

Description	Value
Frequency range	866 MHz – 870
	MHz
RX gain	17 dB
Noise figure	< 0.9 dB
Transmit power	15 dBm / 30 mW
TX path through loss	< 0.8 dB
Input and output impedance	50 Ω



Active Antenna Series

FLARM BOOSTER

Product Number: 69350

Usage:

Amplification of FLARM received signal with bypass of transmit signal.

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RF Parameters

Description	Value
Transmit power (max)	15 dBm / 30 mW
RX to TX switching time (max)	200 ns

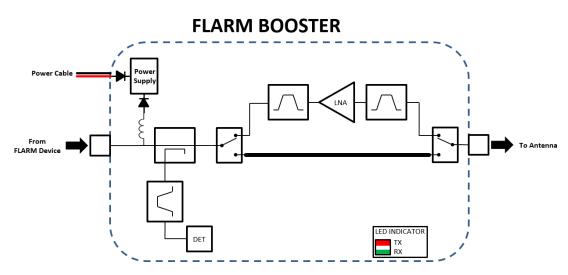
DC Parameters (typical)

Description	Value
DC supply voltage	5 - 15V
DC supply current	70 mA
Operating temperature	0 °C – 60 °C

Absolute Maximum Ratings @25°C

Description	Value
Transmit power	20 dBm / 100 mW
DC supply voltage	15 V
Operating Temperature	0 °C - +60 °C
Storage Temperature	-20 °C - +65 °C
Usage	Indoor Use

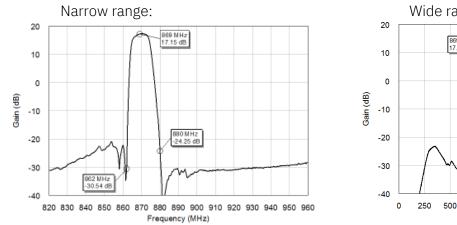
Block Diagram



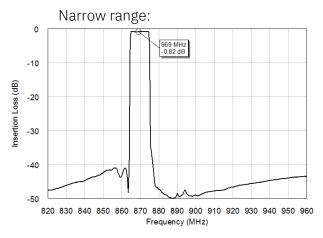
jetvision True Air Traffic	Notes:	
Title: Active Antennas Series	Article No: 69350	Version: 4.0
FLARM BOOSTER	Author: Günter Köllner	© Copyright 2022

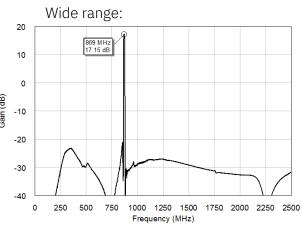


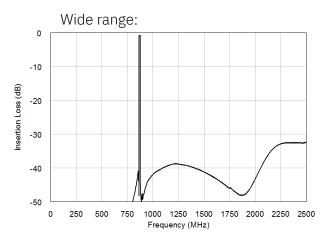
Receive gain over Frequency



TX loss over Frequency







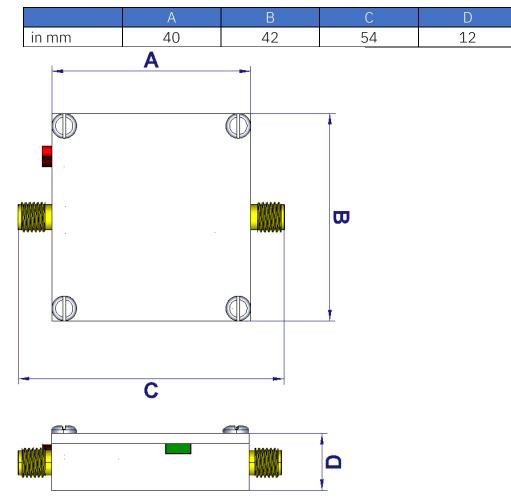
Mechanical Specification

Description	Value
Overall Dimensions	54mm x 42mm x 12mm
Weight	30g

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Outline



Mounting Instructions

Description	Value
Mounting Direction	vertical, Antenna element upwards
SMA torque	1Nm ⁽¹⁾

⁽¹⁾ If there is no torque spanner just tighten with fingers. Do not overtighten when using standard spanners or other tools.

We reserve the right to make technical changes, which serve to improve the product, without prior notification.

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