





## A12-1090-A & BT12-A

# Low Noise 1090MHz Preamplifier & Bias Tee

#### **Overview**

The **A12-1090-A** is a Low Noise Preamplifier designed to improve the reception of the S/ADS mode B beacons sent out by the commercial aircrafts at 1090MHz.

It is provided with a waterproof ABS case suitable for a 44mm (max) diameter mast.

The **BT12-A** Bias Tee is to be used to insert a 12Vdc power supply to feed the amplifier through the coaxial cable.

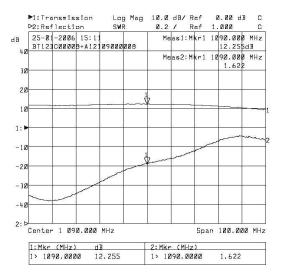
Supplied with of all the needed accessories for an easy installation on the mast.



### **Typical Lab Test Report**

Test BT12-A ON	
GAIN @1090MHz	> 11.0 dB
VSWR INPUT @1090MHz	< 1:1.5 (RL < -15
	dB)

Test BT12-A OFF	
INSERTION LOSS @1090MHz	< 2 dB
VSWR INPUT @1090MHz	< 1:2 (RL < -10 dB)
INSERTION LOSS BT12-A @1090MHz	< 0.8 dB



ELAD A12-1090-A BT12-A

1/2

Datasheet - Rev 4 - 03/2022

www.eladit.com - www.elad-usa.com

© 2022 ELAD S.r.I. All rights reserved. No part of this document may be reproduced, published, used, disclosed or disseminated in any form or by any means, electronic, photocopying or otherwise, without prior written permission of ELAD S.r.I.



# ELAD: RADIOLUTIONA



### **General Specs and Features**

A12-1090-A - Low Noise Preamplifier		
Frequency Range	1030MHz – 1090MHz	
Input Connector	N female	
Output Connector	N female	
Gain	12 dB	
Noise Figure (max)	0.9 dB	
Power Supply	+12Vdc	
DC Max Input Level	+2 dBm	
Current Consumption	100mA	
Dimensions (mm)	75 x 95 x 45	
Internal Case	Plated Steel	
External Case	ABS Waterproof	

BT12-A - 12Vdc Bias Tee		
Input Connector	N female	
Output Connector	BNC female	
Noise Figure (max)	0.9 dB	
Input Power Supply	+12Vdc (2.1mm socket)	
Dimensions (mm)	80 x 73 x 27	
Case	Plated Steel	





### **Package Contents**

- A12-1090-A Preamplifier
- Waterproof ABS case •
- Bracket, screws and nuts •
- BT12-A Bias Tee
- Jack connector with • solder contacts



ELAD A12-1090-A BT12-A

2/2

Datasheet - Rev 4 - 03/2022

www.eladit.com - www.elad-usa.com

© 2022 ELAD S.r.I. All rights reserved. No part of this document may be reproduced, published, used, disclosed or disseminated in any form or by any means, electronic, photocopying or otherwise, without prior written permission of ELAD S.r.l.