

# TX170-BLG-120 User Manual

# 170MHz Outdoor Omnidirectional Fiberglass N-J Connector



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# Contents

Disclaimer	2
1 Introduction	3
2 Parameters	3
3 Antenna features	4
4 FAQ	5
About us	5



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### **1** Introduction

TX170-BLG-120 is a fiberglass positioning antenna of 170MHz frequency band. Its length is 1200mm with N-J interface. The antenna housing is made of glass fiber material and contains multiple antenna oscillators, which has the advantages of high gain and long communication distance. It is water-proof, sun-proof, wind-proof and hermetic, which can be widely used in the wild and bad environment. Because of the high stability and reliability of FRP antenna, it can also be used in wireless terminal equipment, base station, gateway, wireless module, AP, router, wireless modem and other places with high requirements.

## **2** Parameters

Electrical pa	rameters
Center frequency	170MHz
Antenna bandwidth	165-175MHz
Antenna gain	5dBi
Voltage standing wave ratio	≤1.5
Polarization direction	Vertical polarization
Radiation direction	Omnidirectional
Input resistance	50Ω
Power capacity	100W
Other para	ameters
Product size	1200mm
Weight	390g
Antenna Diameter	Ф20mm
Material	Fiberglass
Connector	N-J
Operating temp.	-40°C~+85°C
Storage temp.	-40°C~+85°C
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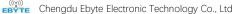
# 3 Antenna features

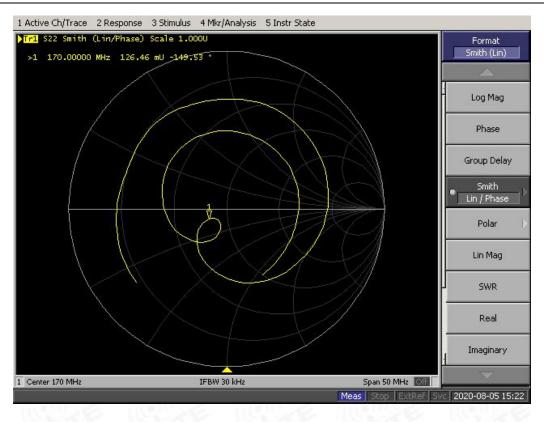
#### VSWR



#### **Smith Chart**







# 4 FAQ

- The antenna frequency must match the frequency of the wireless device, otherwise the communication effect will be poor;
- The lower the communication frequency and the longer the wavelength, the better the diffraction performance;
- When there is a straight-line communication obstacle, the communication distance will be attenuated accordingly;
- Please pay attention to the antenna radiation direction, the incorrect installation direction of the antenna leads to a short transmission distance;
- The ground absorbs radio waves, and the test result near the ground is poor. It is recommended to increase the height;
- Sea water has a strong ability to absorb radio waves, so the seaside test results are not good;
- If there is a metal object near the antenna or placed in a metal shell, the signal attenuation will be very serious;
- The poor impedance matching between the antenna and the communication device will lead to poor communication effects.

#### About us

Technical support: support@cdebyte.com

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