



Datasheet: EtherHaul™ 2ft dual-band antenna

EH-ANT-2ft-DL5 (E-Band and 5GHz)

Introduction

EtherHaul™ E-band ODUs support a variety of antennas depending on the intended application, from street level to roof top, from short to long reach. This document provides information for the **2ft 70/80GHz (E-Band) and 5GHz dual-band antenna**. It starts with the compatibility between the antenna and Siklu ODUs, continues with the specifications and closes with illustrations of the antenna. Information on other E-Band antennas is included in “DS_EH-ANT-E-band family” also available on Siklu’s Partners’ Portal.

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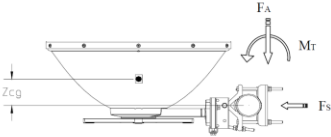


The compatibility of the EH-ANT-2ft-DL5 antenna to Siklu ODUs and its specifications are listed in the tables below:

COMPATIBILITY	E-Band	5GHz
	EH-700TX/710T/710TX. Mounting kit: built into the antenna Requires EH-XADPT-SFF-7080GHz available separately from Siklu and/or distributors (refer to FIGURE 3).	Example: Ubiquity AF-5XHD Mount: accessory to attach the radio to Siklu ODU is included with the antenna; attaches to back of Siklu radio (refer to FIGURE 2b).
	EH-1200T/TX & F/FX EH-2200F/FX & EH-2500F/FX EH-5500FD & EH-8010FX. Mounting kit: built into the antenna	

SPECIFICATIONS	E-Band	5GHz
Frequency Range	71 – 86 GHz	5.15 – 5.9 GHz
Regulatory Compliance	ETSI: EN 302 217-4-2 V1.5.1 Class 3 FCC: 47CFR101	ETSI EN 302 217 Range 1 Class 2
Gain	49 dBi +/- 2dB	26 dBi +/- 2dB
3 dB Beam	0.5°	6.5°
Polarization	Linear Vertical / Horizontal	Dual polarized (V & H)
Cross-pol. Discrimination	-	30 dB
Front/Back Ratio	-	>=47 dB
Input power	10 W (max)	10 W (max)
Interface	Circular waveguide E-Band	2x 50cm cables, with RP-SMA male connectors.

MECHANICAL	EH-ANT-2ft-DL5
Weight	10.8Kg (23.8 lbs.)
Radome	ABS

MECHANICAL	EH-ANT-2ft-DL5
Wind Load Forces Survival (220Km/h) Front Side Vertical	$F_a = 1055 \text{ N (107.6 kgf)}$ $F_s = 679 \text{ N (69.2 kgf)}$ Weight 27 Kg ($Z_{cg} = 99\text{mm}$ with 1" ice) 

The environmental specifications for all Siklu provided antennas are the same, and are listed in the following table:

ENVIRONMENTAL (all antennas)				
TEST	STANDARD	DURATION	TEMPERATURE	NOTES
Low Temperature	IEC 68-2-1	72 h	-45°C (-49°F)	-
High Temperature	IEC 68-2-2	72 h	+60°C (140°F)	-
Water Tightness	IEC 529	-	-	IP67 *
Solar Radiation	ASTM G53	1000 h	-	-
Ice And Snow	-	-	-	25mm Radial
Wind Speed				
Survival	-	-	-	220 Km/h
Operation	-	-	-	160 Km/h

* IP67 when the antenna is correctly mounted on the radio per Siklu installation guide.

FIGURE 1: Outline drawing

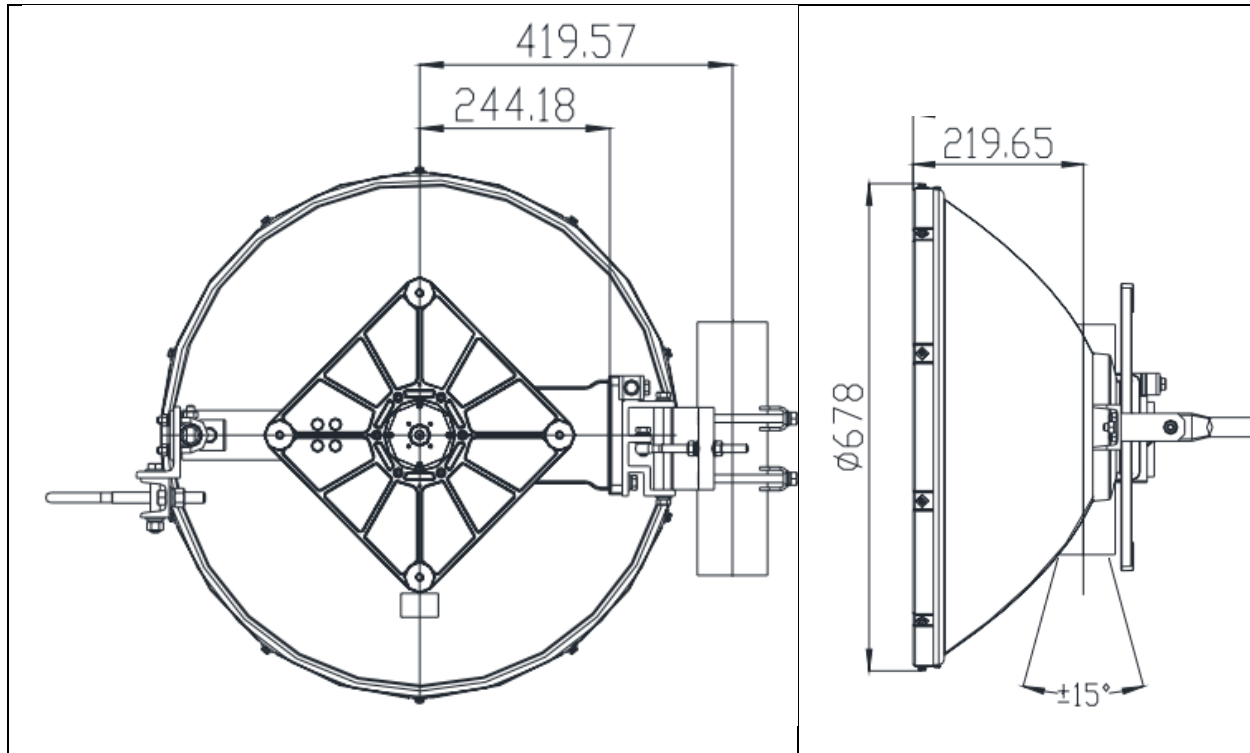


FIGURE 2a: Typical installation (without 5GHz radio or Siklu mount)



FIGURE 2b: Typical installation (with 5GHz radio¹ on Siklu mount)

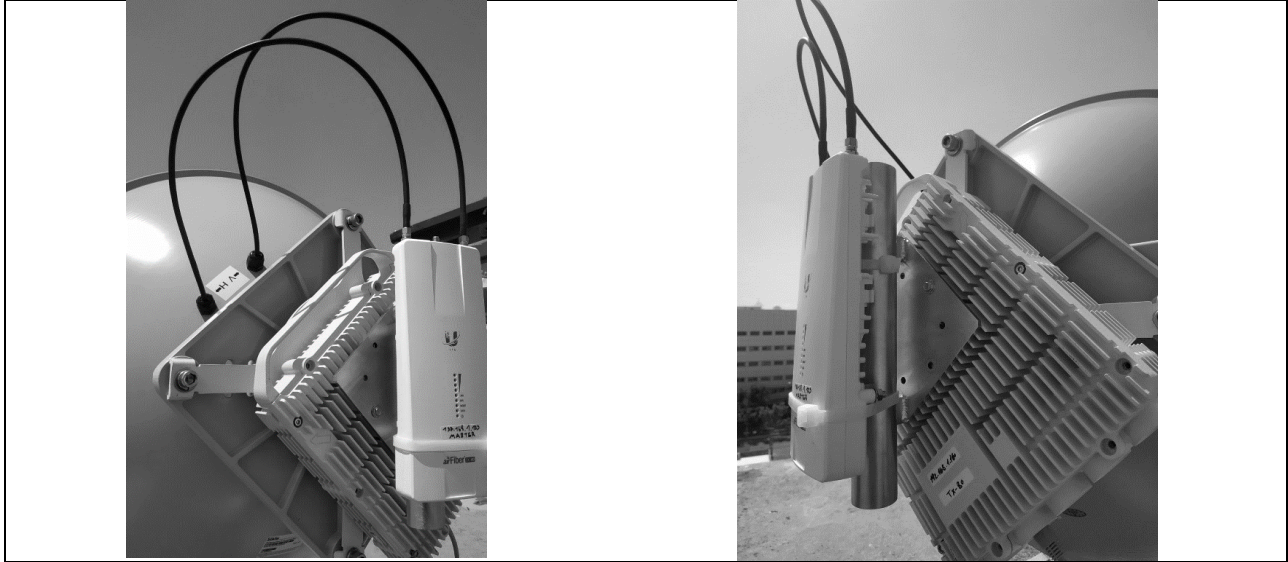


FIGURE 3: EH-XADPT-SFF-7080GHz (for EH-7xx radios)



¹ The mounting and orientation of the 5GHz radio must be according to the recommendations of its vendor.