



Datasheet:

EtherHaul™ E-band Antennas

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 starts with the compatibility between ODUs and antennas, continues with the specifications and closes with the illustrations of the antennas.

Edition: F0, September 2020



The compatibility of the antennas to Siklu ODUs is listed in the Compatibility table, and their performance is listed in the Specifications table below:

COMPATIBILITY	16-cm/ 0.5ft	31 cm / 1ft	38 cm / 1ft+	65 cm / 2ft
EH-700TX/710T/710TX	EH-ANT-0.5ft Mounting kit: EH-MK-SM	EH-ANT-1ft-B Mounting kit: AX-MK-1ft-B (or EH-MK-1ft)	EH-ANT-1ft-CI3 (requires EH-XADPT-SFF-7080GHz) Mounting kit: built into the antenna	EH-ANT-2ft-B (requires EH-XADPT-SFF-7080GHz) Mounting kit: built into the antenna
EH-1200T/TX EH-1200F/FX EH-2200F/FX EH-2500F/FX EH-5500FD	EH-ANT-0.5ft-SLIM Mounting kit: AX-MK-1ft-B, AX-MK-SP	EH-ANT-1ft-B Mounting kit: AX-MK-1ft-B, AX-MK-SP	EH-ANT-1ft-CI3 Mounting kit: built into the antenna	EH-ANT-2ft-B Mounting kit: built into the antenna
EH-8010FX	EH-ANT-0.5ft-8000 Mounting kit: AX-MK-1ft-B, AX-MK-SP	EH-ANT-1ft-B Mounting kit: AX-MK-1ft-B, AX-MK-SP	EH-ANT-1ft-CI3 Mounting kit: built into the antenna	EH-ANT-2ft-B Mounting kit: built into the antenna

SPECIFICATIONS	16-cm/ 0.5ft	31 cm / 1ft	38 cm / 1ft+	65 cm / 2ft
Part Number	EH-ANT-0.5ft EH-ANT-0.5ft-SLIM EH-ANT-0.5ft-8000	EH-ANT-1ft-B	EH-ANT-1ft-CI3	EH-ANT-2ft-B
Frequency Range	71 – 86 GHz			
Regulatory Compliance	ETSI: EN 302 217-4-2 V1.5.1 Class 2 FCC: N/A (not permitted)	ETSI: EN 302 217-4-2 V1.5.1 Class 2 FCC: 47CFR101	ETSI: EN 302 217-4-2 V1.5.1 Class 3 FCC: 47CFR101	ETSI: EN 302 217-4-2 V1.5.1 Class 3 FCC: 47CFR101
Gain	38 dBi +/- 2dB	43 dBi +/- 2dB	46 dBi +/- 1dB	50 dBi +/- 2dB
3 dB Beam	2°	0.9°	0.7°	0.5°
Polarization	Linear Vertical / Horizontal			
Input power	10 W (max)			
Interface	Circular waveguide E-band			

SPECIFICATIONS	16-cm/ 0.5ft	31 cm / 1ft	38 cm / 1ft+	65 cm / 2ft
Weight	980g (2.2 lbs.)	2.2kg (4.8 lbs.)	7.2kg (15.8 lbs.)	10.8Kg (23.8 lbs.)
Radome	Plastic	Plastic	ABS	
Wind Load Forces Survival (220Km/h)				
Front	136.6N(13.7kgf)	291.5 N (29.7 kgf)	Fa = 430N(43.8 kgf)	Fa = 1055 N (107.6 kgf)
Side	82.0 N (8.2 kgf)	168.7 N (17.2 kgf)	Fs = 235N(24kgf)	Fs = 679 N (69.2 kgf)
Vertical	61.5 N (6.2 kgf)	168.7 N (17.2 kgf)	Weight 14.1Kg (Zcg = 19mm with 1" ice)	Weight 27 Kg (Zcg = 99mm 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	-55°C (-67°F)	-
High Temperature	IEC 68-2-2	72 h	+71°C (159.8°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: 0.5FT Antenna outline drawing (EH-ANT-0.5ft)

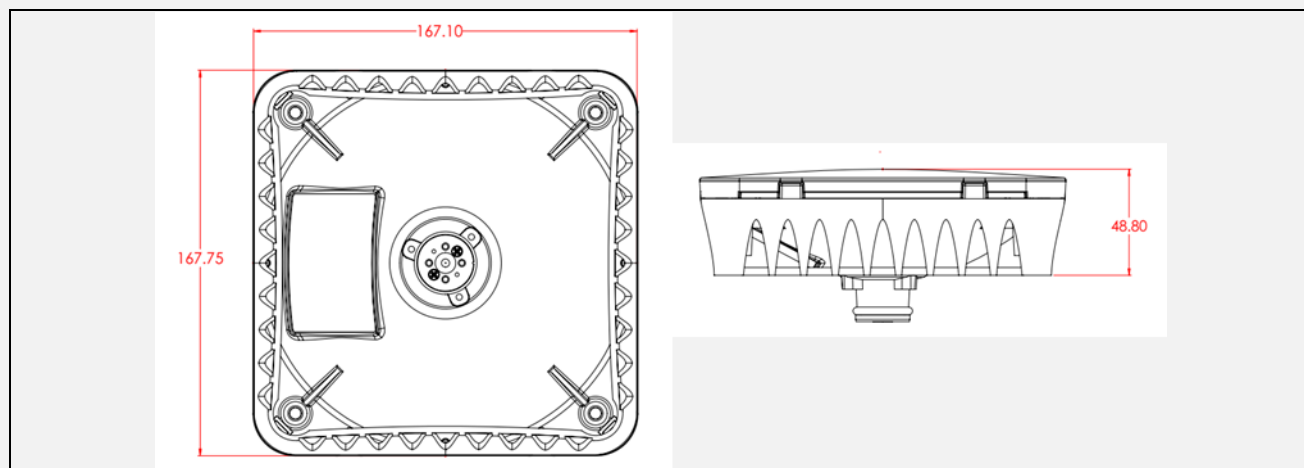


FIGURE 1a: 0.5FT Antenna (EH-ANT-0.5ft)



FIGURE 2: 0.5FT-SLIM Antenna outline drawing (EH-ANT-0.5ft-SLIM)

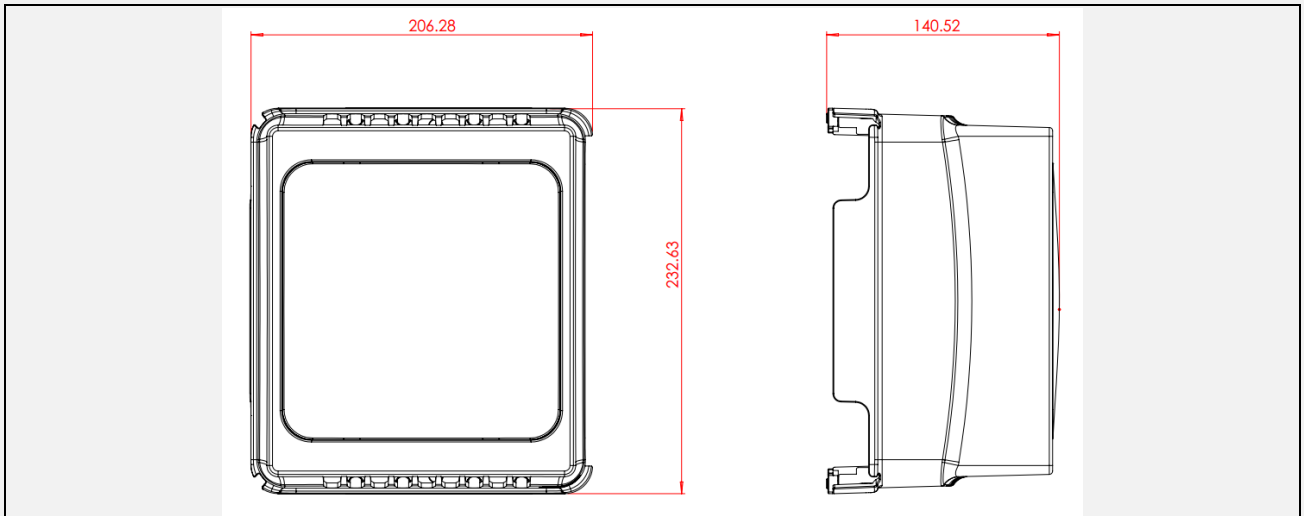


FIGURE 2a: 0.5FT-SLIM Antenna (EH-ANT-0.5ft-SLIM, mounted on ODU)



FIGURE 2b: 0.5FT-SLIM Antenna outline drawing (EH-ANT-0.5ft-8000)

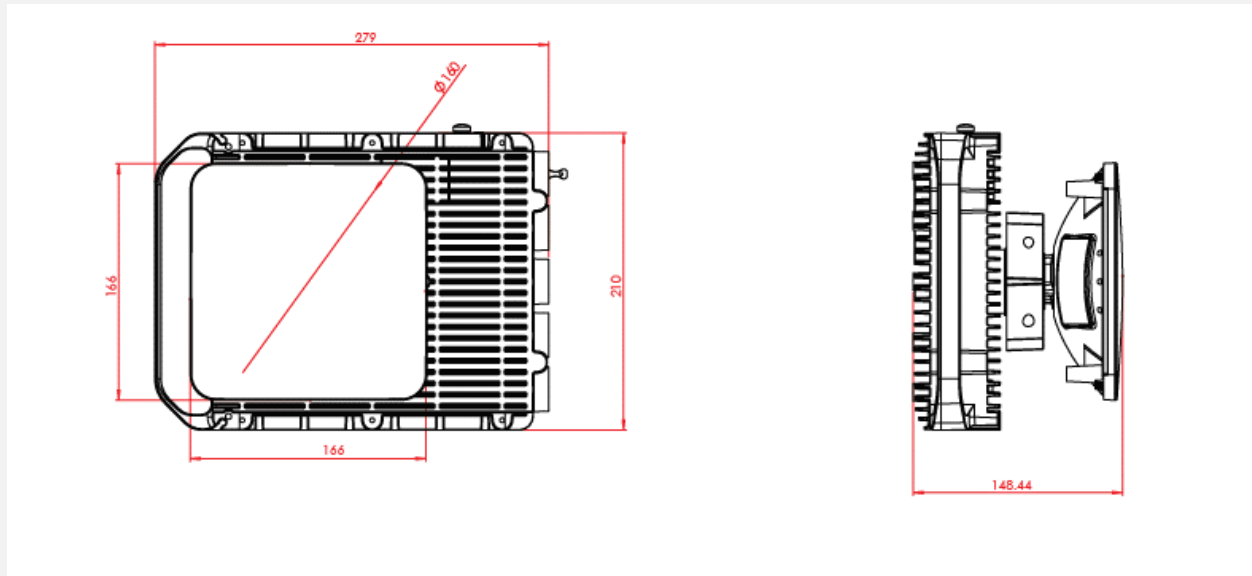


FIGURE 3: 1FT Antenna outline drawing (EH-ANT-1ft-B)

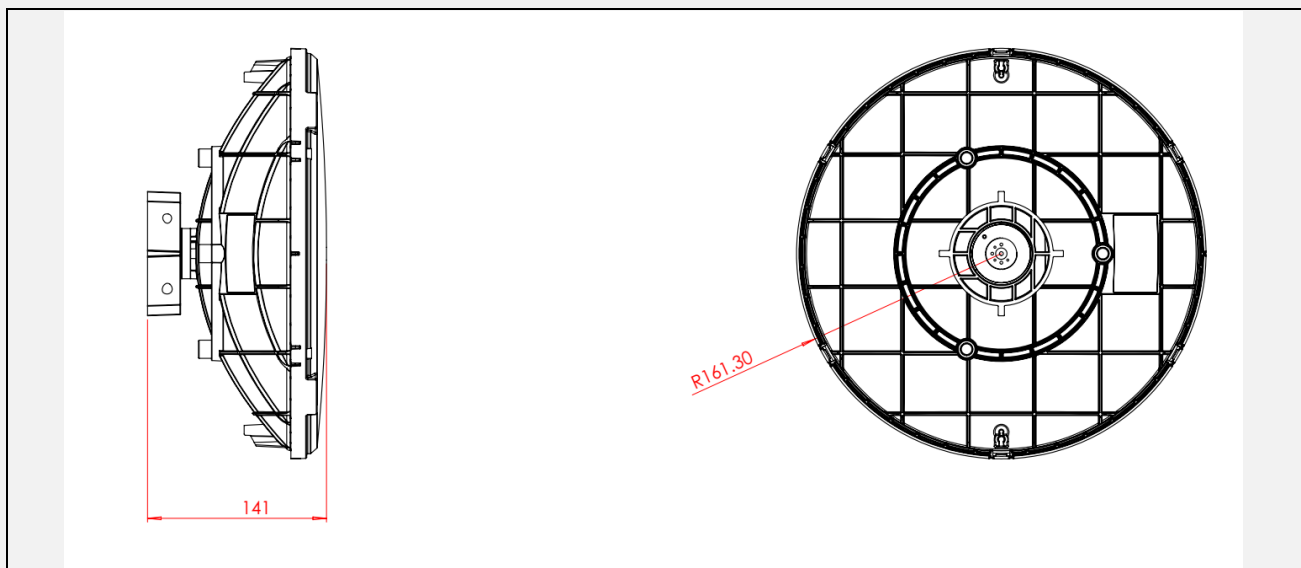


FIGURE 3a: 1FT Antenna (EH-ANT-1ft-B, mounted on ODU)



FIGURE 4: 1FT Antenna outline drawing (EH-ANT-1ft-C13)

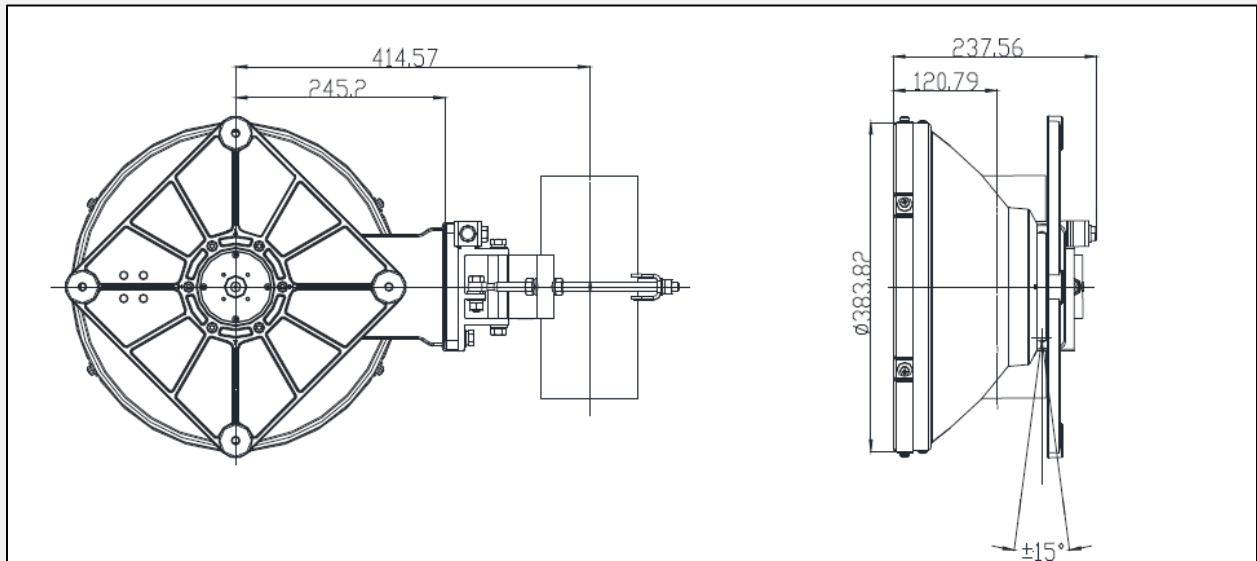


FIGURE 5: 2FT Antenna outline drawing (EH-ANT-2ft-B, EH-ANT-2ft-M)

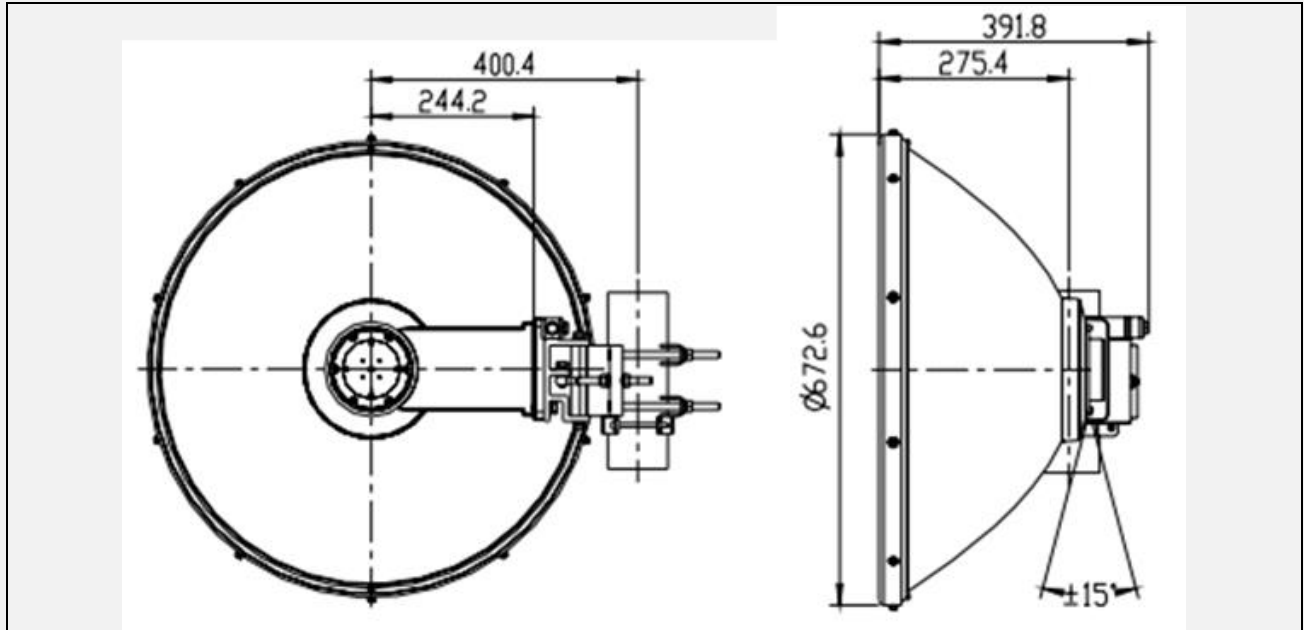


FIGURE 5a: 2FT Antenna installation (EH-ANT-2ft-B)



FIGURE 5b: EH-XADPT-SFF-7080GHz (for EH-7xx radios and EH-ANT-2ft-B)

