



## Description

This antenna consists of a 0.9m (3 ft) reflector, feeder and antenna mounting bracket. The mounting bracket is designed for installation on vertical pipe of diameter 35mm to 75mm. The precise antenna mounting bracket provides adjustment ranges of  $\pm 19^\circ$  fine elevation and  $\pm 11^\circ$  fine azimuth.

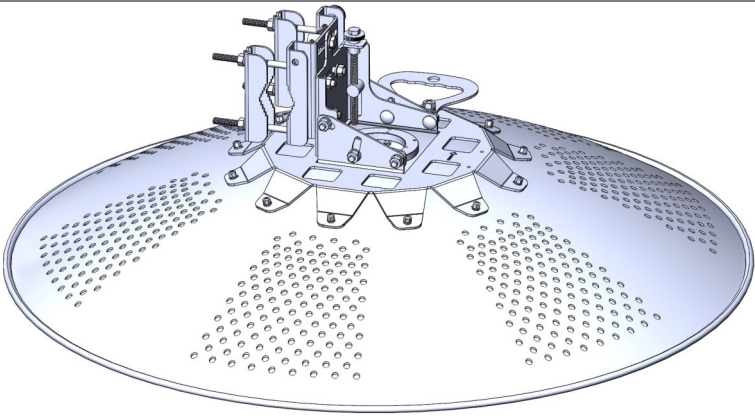

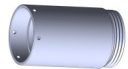
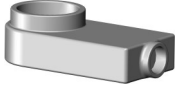




## Notice

The installation, maintenance or removal of antenna systems requires qualified, experienced personnel. This installation instructions have been written for such personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment. Honorwave disclaims any liability or responsibility for the results of improper or unsafe installation practices.

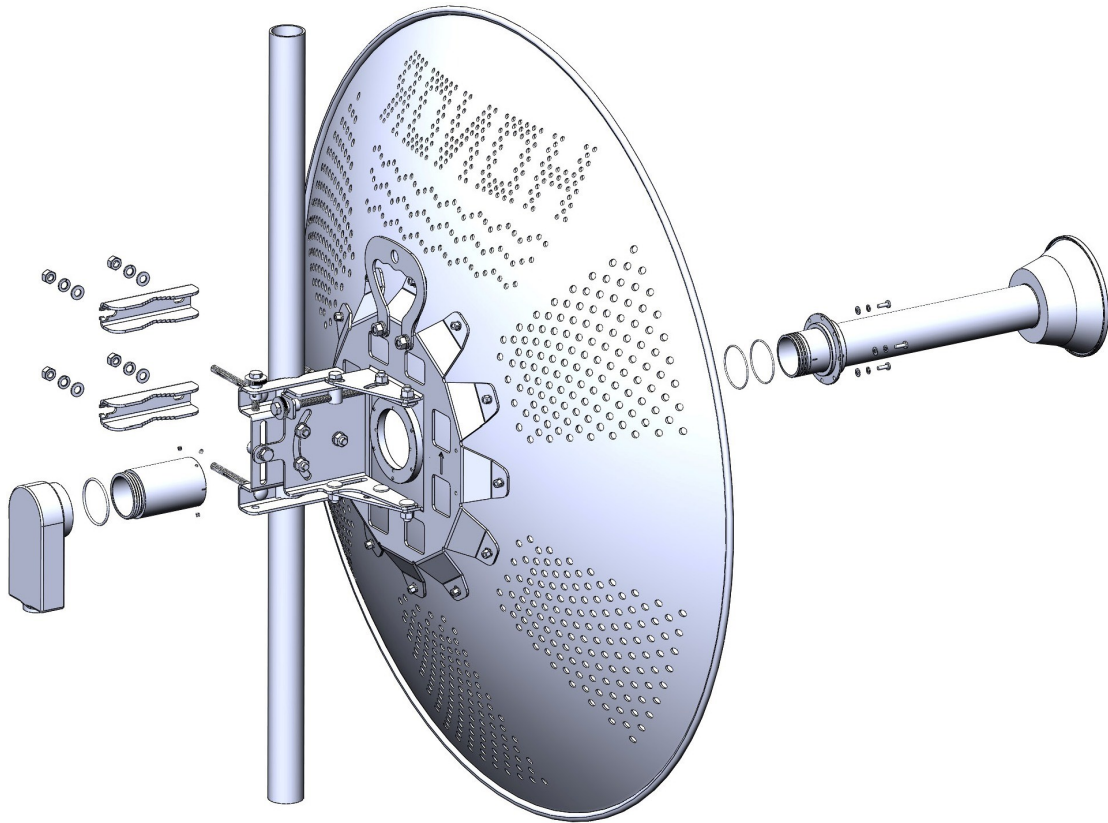
## Tools Required

Item	Contents	Qty	Image
1	Combination Wrench, 13mm	1	
2	Screwdriver, cross-recess	1	

## Part List

Item	Contents	Qty	Description / Image
A	Reflector 0.9m (3ft) & Mounting	1	
B	Feeder	1	
C	Transition	1	
D	Radio C5X	1	
E	Screw M4x12, Cross, st	4	
F	Spring Washer M4, st	4	
G	Washer M4, st	4	
H	Screw M4x4, Allen, st	1	
I	Oring 2.5x50	1	
J	Oring 1.5x48	2	
K	Installation Guide	1	

## Installation



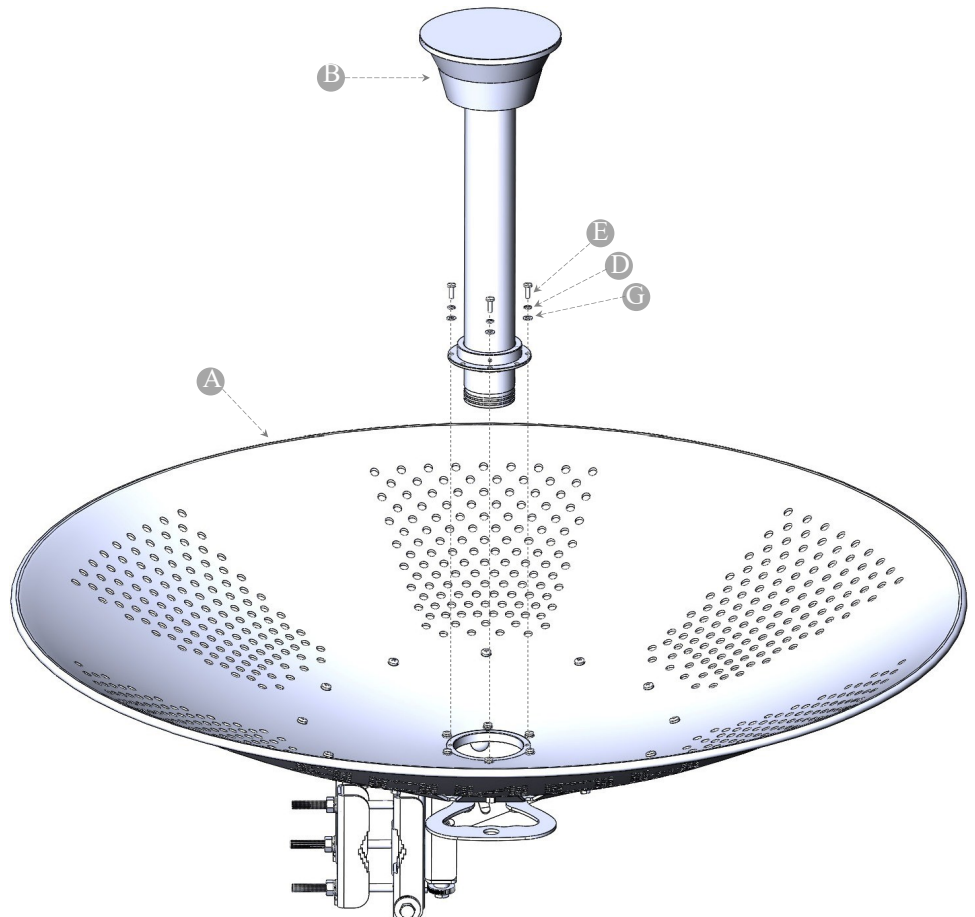
### 1 Install Feed to Reflector

Install Feed [B] to Reflector [A] by:

[E] Screw M4x12; 4 pcs

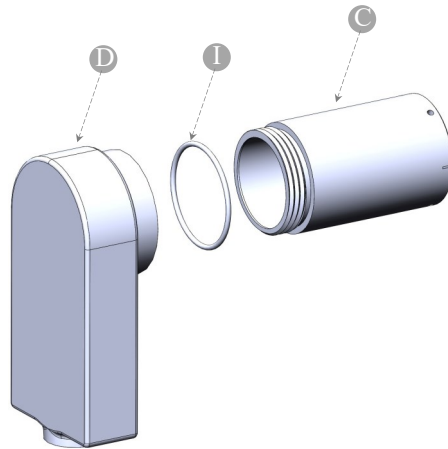
[F] Spring Washer M4; 4 pcs

[g] Washer M4; 4 pcs



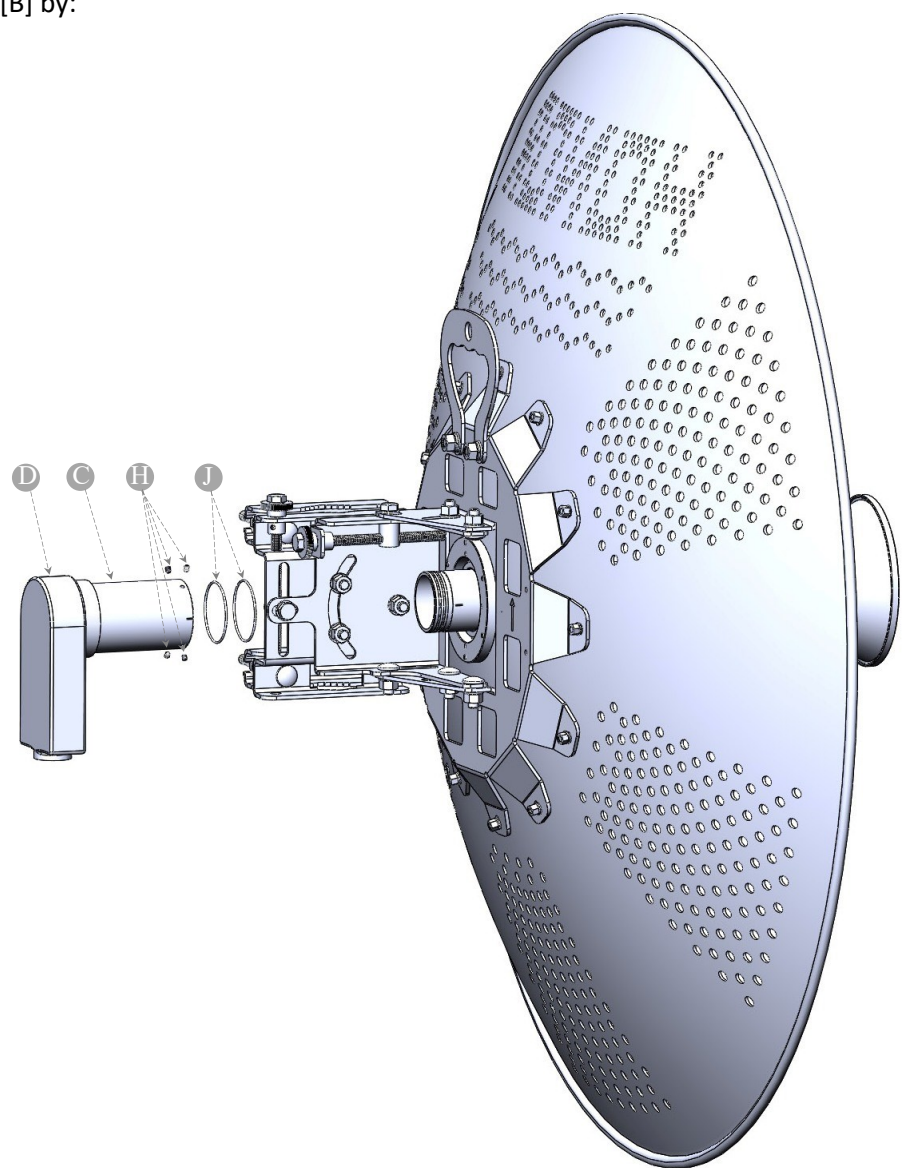
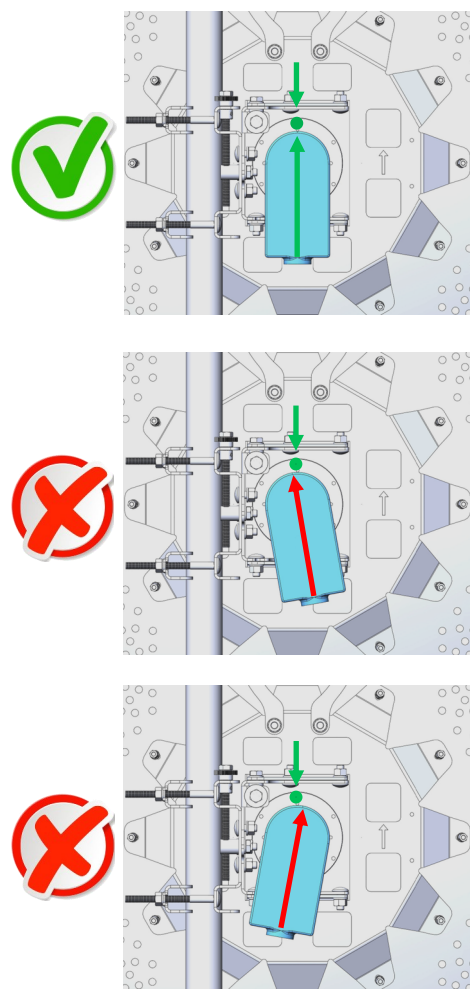
## 2 Attach Transition to Radio

Install Transition [C] to Radio [D] by:  
[I] Oring 2.5x50; 1 pcs



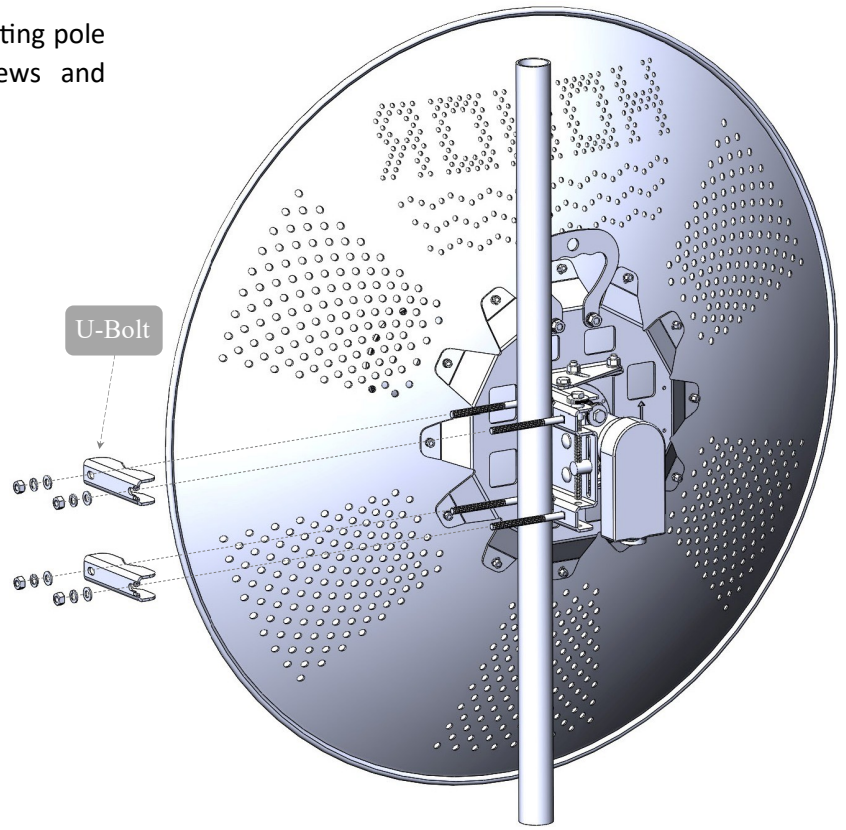
## 3 Adjust Radio to Antenna

Install Transition [C] & Radio [D] to Feed [B] by:  
[H] Screw M4x4, Allen; 4 pcs  
[J] Oring 1.5x48; 2 pcs



## 4 Attach Antenna to Mounting Pole

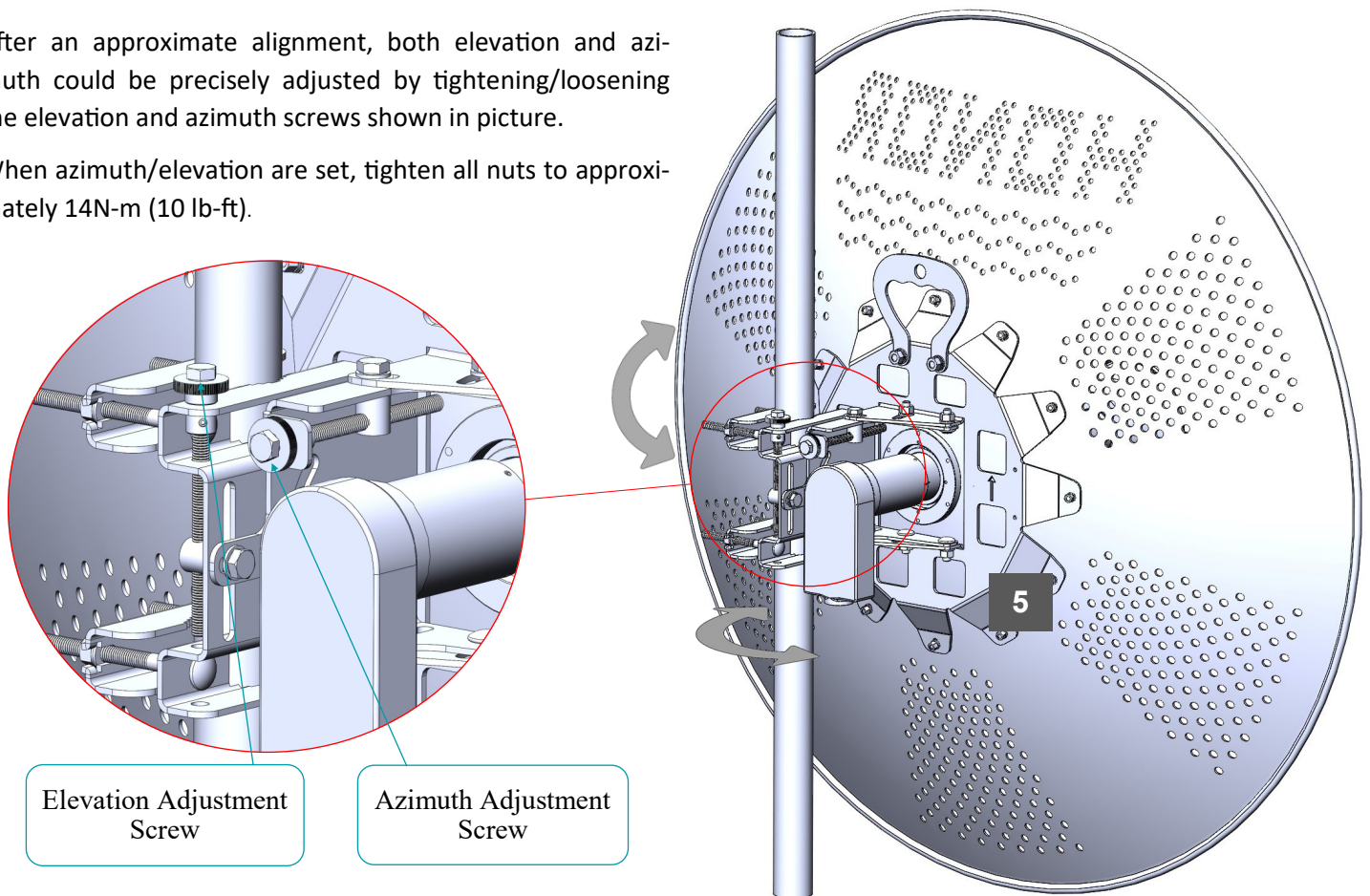
Follow the picture to attach antenna to mounting pole then place the U-bolts on the M8x120 Screws and tighten M8 nuts.



## 5 Adjust Azimuth and Elevation

After an approximate alignment, both elevation and azimuth could be precisely adjusted by tightening/loosening the elevation and azimuth screws shown in picture.

When azimuth/elevation are set, tighten all nuts to approximately 14N-m (10 lb-ft).



## TECHNICAL DATA SHEET

### General Specifications

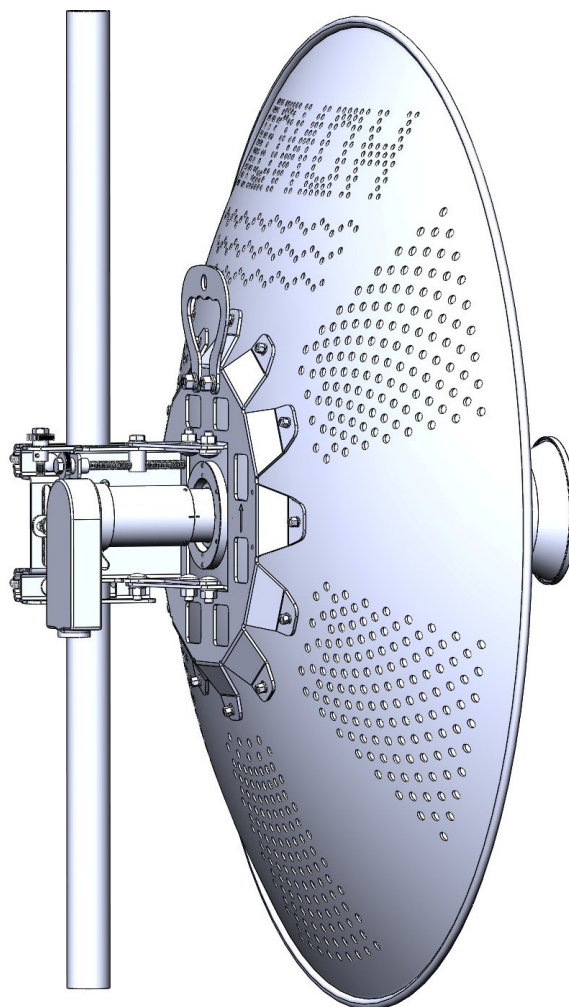
Model Number	HW4X-31.5D-HP
Diameter (ft/m)	3/0.9
Polarization	Dual-slant 45°

### Electrical Specifications

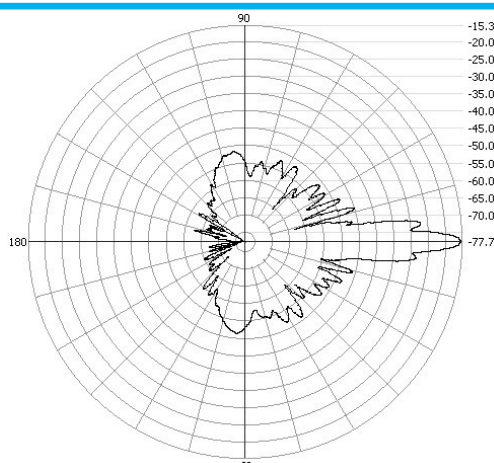
Input	Twist on
Frequency Range	4.5 GHz up to 5GHz ISM Band
VSWR	1.4:1
Impedance ( $\Omega$ )	50
Gain (dBi)	31.5
3dB Beamwidth	H-plane: 4.5° / E-plane: 4.5°
F/B Ratio (dB)	40

### Mechanical Specifications

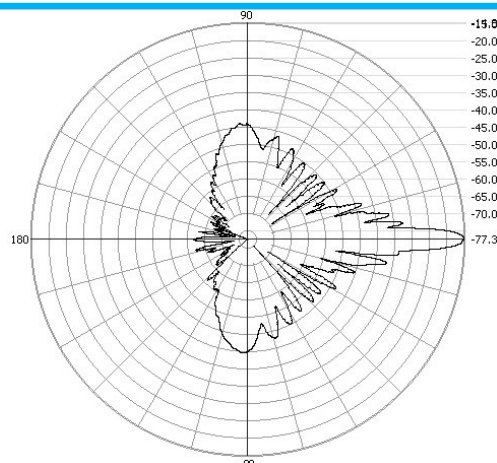
Weight With Holder (kg)	9.5
Color	Golden
Plating	Dacromet
Screws and Nuts	Dacromet
Fine Azimuth Adjustment	$\pm 11^\circ$
Fine Elevation Adjustment	$\pm 19^\circ$
Wind Loading (km/h)	200
Operating Temperature	-40 °C to 60 °C
Supportable Comparative Damp	90%



### Patterns



E-Plane



H-Plane

For further technical support leave message at

E-mail: [support@honorwave.com](mailto:support@honorwave.com)

whatsapp: +964 770 607 7724 8 A.M - 5 P.M (GMT+3)

All messages will be answered in 2 working days.