



The World's Leading Original Equipment and  
Design Manufacturer of Communication Antennas



- ★ The antenna product can correspond with branded electronic devices in the market.  
(ex. BUC 、 intergraded LNB 、 Transceiver...etc.)
- ★ Antenna performance may vary by using different electronic devices or feed horn.



## Ku VSAT antenna

Item No.	VSAT E74		VSAT E97		VSAT E120	
<b>Reflector Dish</b>						
Type	Elliptical		Elliptical		Elliptical	
Offset Angle	18.6°		18.44°		18.29°	
Physical Size Short Axis	75 cm		97 cm		118.4 cm	
Physical Size Long Axis	77.3 cm		99.8 cm		122.1 cm	
Aperture Diameter	74.0 cm		95.8 cm		117.2 cm	
F/D Ratio	0.75		0.75		0.75	
Focus Length	555 mm		710 mm		877.5 mm	
<b>Antenna Specification</b>						
	TX		RX		TX	
Operation Frequency	13.75 ~ 14.5 GHz		10.7 ~ 12.75 GHz		13.75 ~ 14.5 GHz	
Efficiency	70% Min.		70% Min.		70% Min.	
Ku-Band Gain	39.2 dBi @ 14 GHz		37.8 dBi @12.75 GHz		40.7 dBi @ 14 GHz	
3dB Beamwidth	1.6° Max.		1.8° Max.		39.1 dBi @12.75 GHz	
Cross Polarization on Axis within 1 dB Beamwidth	30 dB		25 dB		43.0 dBi @ 14 GHz	
Feed Interface	WR75		WR75		42.0 dBi @ 12.75 GHz	
<b>Mounting</b>						
Mounting Type	Pole Mount		Pole Mount		Pole Mount	
Adjustment Type	AZ / EL Adjustable		AZ / EL Adjustable		AZ / EL Adjustable	
Material	Galvanized Steel		Galvanized Steel		Galvanized Steel	
Finish	Polyester Coating		Polyester Coating		Polyester Coating	
Color	Light Grey / Dark Grey		Light Grey / Dark Grey		Light Grey / Dark Grey	
Elevation Range	10° ~ 90°		10° ~ 90°		5° ~ 90°	
Azimuth Range	0° ~ 360°		0° ~ 360°		0° ~ 360°	
Pole Diameter Acceptable	φ 60 mm		φ 60 mm		φ 76 mm	
<b>Environment</b>						
Operational Winds	55 mph		55 mph		55 mph	
Survival Winds	100 mph		100 mph		100 mph	
Ambient Temperature	-40°C ~ +60°C		-40°C ~ +60°C		-40°C ~ +60°C	
Relative Humidity	0 ~ 100%		0 ~ 100%		0 ~ 100%	



VSAT E97



VSAT E120

## Ka VSAT antenna

Item No.	VSAT E74		VSAT E97		VSAT E120				
<b>Reflector Dish</b>									
Type	Elliptical		Elliptical		Elliptical				
Offset Angle	18.6°		18.44°		18.29°				
Physical Size Short Axis	75 cm		97 cm		118.4 cm				
Physical Size Long Axis	77.3 cm		99.8 cm		122.1 cm				
Aperture Diameter	74.0 cm		95.8 cm		117.2 cm				
F/D Ratio	0.75		0.75		0.75				
Focus Length	555 mm		710 mm		877.5 mm				
<b>Antenna Specification</b>									
	TX		RX		TX		RX		
Operation Frequency	29 ~ 31 GHz		19.2 ~ 21.2 GHz		29 ~ 31 GHz		19.2 ~ 21.2 GHz		
Efficiency	70% Min.		70% Min.		70% Min.		70% Min.		
Ka-Band Gain	45.3 dBi @ 29.0 GHz		41.2 dBi @ 19.7 GHz		46.9 dBi @ 29 GHz		43.9 dBi @ 19.2 GHz		
3dB Beamwidth	0.9° Max.		1.4° Max.		0.7° Max.		1.1° Max.		
TX/RX Sidelobe Level	29-25 log $\theta$ dB		$\theta_{min} < \theta \leq 20^\circ$		29-25 log $\theta$ dB		$\theta_{min} < \theta \leq 20^\circ$		
	-3.5 dB		$20^\circ < \theta \leq 26.3^\circ$		-3.5 dB		$20^\circ < \theta \leq 26.3^\circ$		
	32-25 log $\theta$ dB		$26.3^\circ < \theta \leq 48^\circ$		32-25 log $\theta$ dB		$26.3^\circ < \theta \leq 48^\circ$		
	-10 dB		$48^\circ < \theta \leq 180^\circ$		-10 dB		$48^\circ < \theta \leq 180^\circ$		
Cross Polarization on Axis within 1 dB Beamwidth	30 dB Min		25 dB Min		30 dB Min		25 dB Min		
<b>Mounting</b>									
Mounting Type	Pole Mount			Pole Mount			Pole Mount		
Adjustment Type	AZ / EL Adjustable			AZ / EL Adjustable			AZ / EL Adjustable		
Material	Galvanized Steel			Galvanized Steel			Galvanized Steel		
Finish	Polyester Coating			Polyester Coating			Polyester Coating		
Color	Cool Grey / Dark Grey			Cool Grey / Dark Grey			Cool Grey / Dark Grey		
Elevation Range	5° ~ 90°			10° ~ 90°			5° ~ 90°		
Azimuth Range	0° ~ 360°			0° ~ 360°			0° ~ 360°		
Pole Diameter Acceptable	φ 60 mm			φ 60 mm			φ 76 mm		
<b>Environment</b>									
Operational Winds	55 mph			55 mph			55 mph		
Survival Winds	100 mph			100 mph			100 mph		
Ambient Temperature	-40°C ~ +60°C			-40°C ~ +60°C			-40°C ~ +60°C		
Relative Humidity	0~100%			0~100%			0~100%		



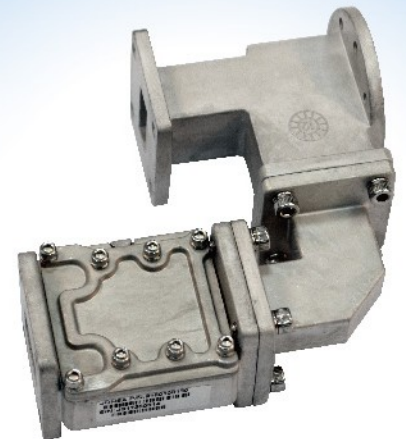
Ku Horn



Ka Horn



OMT 91601001

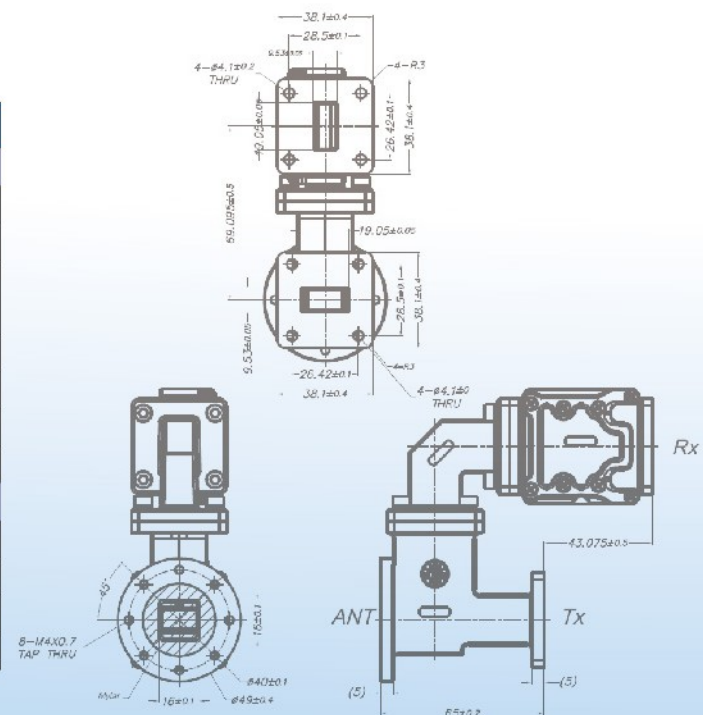


## Ku Band Linear / Ka Band Circular Polarity Feed Horn

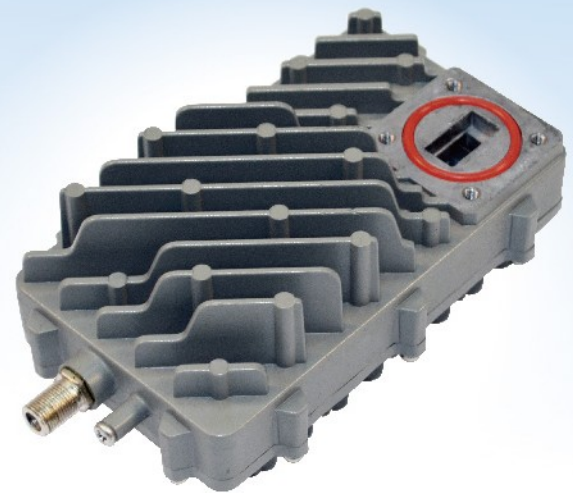
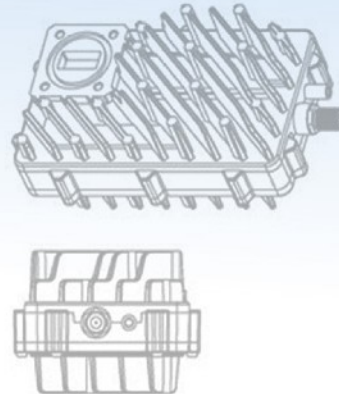
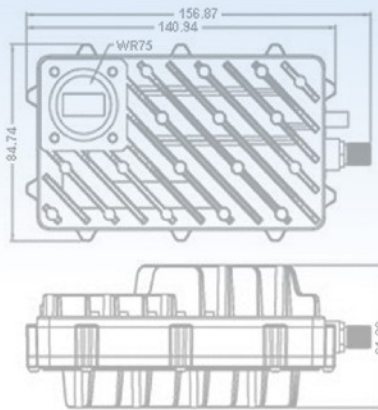
Item No.	91402401	91401602	91401601
	Ku Band Linear	Ka Band Circular	Ka Band Circular
Tx band Frequency	13.75 ~ 14.5 GHz	27 ~ 31 GHz	27 ~ 31 GHz
Rx band Frequency	10.95 ~ 12.75 GHz	17.7 ~ 21.2 GHz	17.7 ~ 21.2 GHz
f/D range	0.7 ~ 0.8	0.7 ~ 0.8	0.7 ~ 0.8
Polarity	Orthogonal Linear Polarity	Orthogonal CP	Orthogonal CP
Rotation	360° Continuous	360° Continuous	360° Continuous
Tx band Return Loss	20 dB	20 dB	20 dB
Rx band Return Loss	17 dB	17 dB	20 dB
Isolation (Tx band)	80 dB		
Isolation (Rx band)	40 dB		
Insertion Loss (Tx band)	0.3 dB		
Insertion Loss (Rx band)	0.4 dB		
Tx band Interface	WR75		
Rx band Interface	WR75		

## OMT Specification Sheet

Item No.	91601001	
	Specification	
Electrical		
Frequency	Rx 10.70 ~ 12.75 GHz	Tx 13.75 ~ 14.50 GHz
VSWR	1.25 max (19.1 dB) ( OMT antenna port is matched to a feed horn with diameter of 18 ~ 19 mm )	
Insertion loss	Tx to ANT 0.2 dB max	ANT to Rx 0.4 dB max
Transmit to Receive Isolation	85 dB min	
Receive to Transmit Isolation	40 dB min	
X-pol. isolation	30 dB min	
	Environment	
Temperature range	-30%DC ~ +70%DC	
Pressurization	sealed to 5 psi	
Finish	ASTM B 921 Class 4	
Weight	390 g max	



# Electronic products



## 2W / 3W Ku-Band BUC Specification Sheet

Item No.	91612001	91613001	
	2W BUC	3W BUC	
1	Input Frequency Range	14 ~ 14.5 GHz	13.75 ~ 14.5 GHz
2	Output Frequency Range	950 ~ 1450 MHz	950 ~ 1700 MHz
3	LO Frequency	13.05 GHz	12.8 GHz
4	Noise Figure	15 (max) dB	15 (max) dB
5	10MHz External Reference Frequency sensitivity	-15 ~ +5 dBm	-15 ~ +5 dBm
6	Output Power (P1dB)	33.5 dBm	+34 min. over temperature.
7	IF Input VSWR	2.0 : 1	2.0 : 1
8	In Band Spurious(Power +30dBm Output)	-50 dBc	-50 dBc
9	Out of Band Spurious(Power +30dBm Output)	-50 dBc	-50 dBc
10	RF Output VSWR	2.0 : 1	2.0 : 1
11	Small Signal Gain	50 ~ 58 dB	58dB typ., 54dB min.
12	12 Gain Flatness		
	(a) over any 2MHz Band (pk-pk)	0.5 dB	0.5 dB
	(b) over any 125MHz Band (pk-pk)	2.5 dB	2.5 dB
	(c) over any 500MHz Band (pk-pk)	4 dB	4 dB
13	Gain Variation		
	(a) Gain Variation overTemp (any 40 °C)	3 dB	3 dB
	(b) Gain Variation overTemp (any 20 °C)	1.5 dB	1.5 dB
14	SSB Phase Noise		
	(a) @100Hz Offset	-55 dBc / Hz	-55 dBc / Hz
	(b) @1KHz Offset	-70 dBc / Hz	-70 dBc / Hz
	(c) @10KHz Offset	-80 dBc / Hz	-80 dBc / Hz
	(d) @100KHz Offset	-90 dBc / Hz	-90 dBc / Hz
	(e) @1MHz Offset	-100 dBc / Hz	-100 dBc / Hz
15	RF Shut off	-70 dBm	-70 dBm
16	Power Draw	23 Max.	23 Max.
17	DC Voltage Range	15 ~ 30 V	+15 ~ +30 V
18	Inrush Current Peak		2 Amp @ <40 msec
19	Electrical Stability	Unconditional	Unconditional
20	Weight	800 g	800 g
21	Operating Temperature	- 40 ~ +55 °C	- 40 ~ +55 °C



iLNB

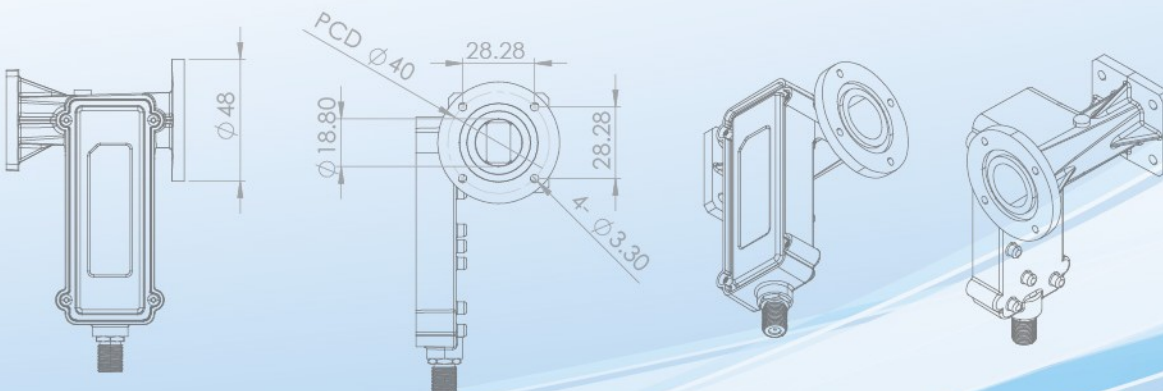


BUC+iLNB



## iLNB Specification

Item No.	91622200-D	91622200-P
	DRO iLNB	PLL iLNB
Low Band I/P Frequency Range	10.7 ~ 11.7 GHz	10.7 ~ 11.7 GHz
O/P Frequency Range	950 ~ 1950 Mhz	950 ~ 1950 MHz
LO Frequency	9.75 GHz	9.75 GHz
High Band I/P Frequency Range	11.7 ~ 12.75 GHz	11.7 ~ 12.75 GHz
O/P Frequency Range	1100 ~ 2150 MHz	1100 ~ 2150 MHz
LO Frequency	10.6 GHz	10.6 GHz
Noise Figure	$\leq 1 \pm 0.2$ dB	$\leq 1 \pm 0.2$ dB
LO Initial Accuracy	$\pm 1.0$ MHz	$\pm 20$ KHz
LO Temperature Drift	$\pm 1.5$ MHz	$\pm 50$ KHz
LO Phase Noise @10K Hz	-90 dBc / Hz	-80 dBc / Hz
Conversion Gain	52~70 dB	52 ~ 70 dB
Gain Variation	$\leq 5 \pm 2$ dB	$\leq 5 \pm 2$ dB
OMT Transmit to Receive Isolation	35 dB	35 dB
OMT Cross Port Isolation	35 dB	35 dB
O/P VSWR	2.5 : 1	2.5 : 1
22K Spurious	-50 dBc	
Low/high band switch threshold voltage		14 ~ 15 V
DC Current	130 mA	130 mA
Working Temperature		-40 ~ +70 °C



- ★ Linked articulated design for quick installation.
- ★ Triangle base provides maximum supporting.
- ★ Suitable for various sizes antenna (74~120cm.)
- ★ Galvanized steel with coating for better weather resistance.
- ★ Light weight and compact design easy for storage and transportation.



## TriMast / Heavy Duty mount

Item No.	B6008502	B7609901	A6006002	A7606001
<b>Mechanical</b>				
Mounting Type	Wall, Ground Mount	Wall, Ground Mount	Wall, Ground Mount	Wall, Ground Mount
Material	Galvanized Steel	Galvanized Steel	Galvanized Steel	Galvanized Steel
Finish	Polyester Powder Coating	Polyester Powder Coating	Polyester Power Coating	Polyester Powder Coating
Color	Cool Gray / Dark Gray	Cool Gray / Dark Gray	Cool Gray / Dark Gray	Cool Gray / Dark Gray
Pole Diameter Acceptable	φ 60 mm	φ 76 mm	φ 60 mm	φ 76 mm
Suitable Reflector Size / DTH	90 ~ 120 cm	90 ~ 150 cm	90 ~ 120 cm	90 ~ 150 cm
Suitable Reflector Size / VSAT	74 ~ 100 cm	74 ~ 120 cm	74 ~ 100 cm	74 ~ 120 cm
Installation Area Required	100*120 cm <sup>2</sup>	120*120 cm <sup>2</sup>	110 cm <sup>2</sup>	120*120 cm <sup>2</sup>
<b>Environment</b>				
Ambient Temperature	- 40°C ~ +60°C	- 40°C ~ +60°C	- 40°C ~ +60°C	- 40°C ~ +60°C
Relative Humidity	0% ~ 100%	0% ~ 100%	0% ~ 100%	0% ~ 100%
<b>Packing</b>				
Packing method	2 in 1	2 in 1	Single pack	2 in 1
Carton Dimension	980*240*118 mm	1090*385*105 mm	810*185*175 mm	1090*385*105 mm
Net Weight	4.6 kg / Sets	6.233 kg / Sets	6.3 Kgs / 8 Kgs / Sets	6.233 kg / Sets
Container loading	3360 Sets / 40'CTNR	1080 Sets / 20'CTNR	1936 Sets / 40'CTNR	1080 Sets / 20'CTNR







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