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IAA.01.121111

Specification

Iridium® Certified

Part No.	**IAA.01.121111**
Product Name	External Magnetic Mount Iridium Antenna
Feature	1616MHz ~1626.5MHz Custom cables and connectors available Iridium® has certified the IAA.01.121111 Antenna for commercial use in connection with the Iridium Communications System RoHS Certified

1. Introduction

The IAA.01 is a high performance magnetic mount antenna which is designed specific to communicate efficiently with the Iridium® Satellite Communication system.

The IAA.01 utilises the Taoglas expertise in ceramics by incorporating a ceramic patch tuned specifically for the antenna environment, giving greater stability. The antenna housing is strong, corrosive proof and waterproof to IP67.

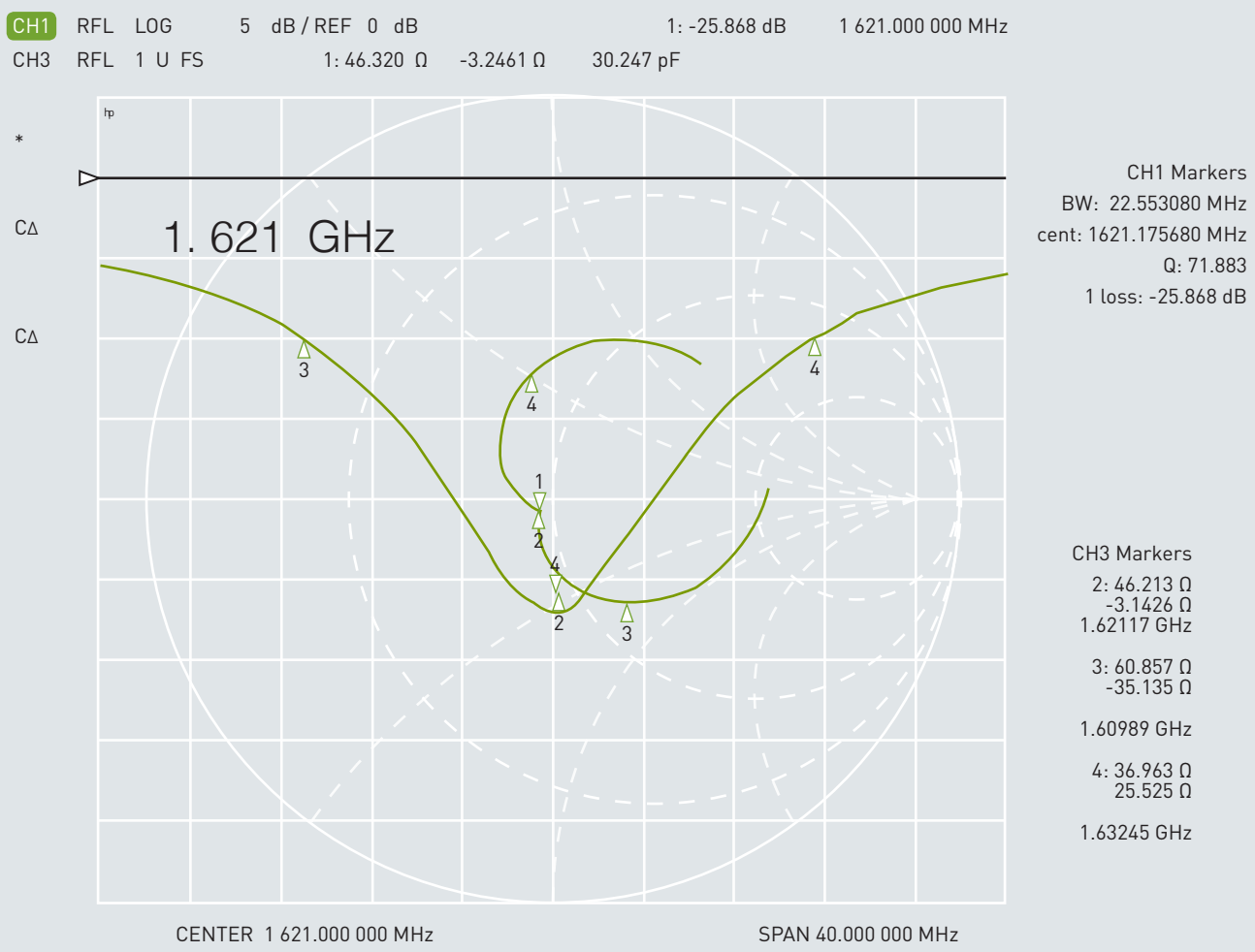
The magnetic mount allows for easy installation and removal between vehicles or assets, it is easily converted to an adhesive type for greater flexibility.

Iridium® has certified the IAA.01.121111 Antenna for commercial use in connection with the Iridium Communications System. Iridium Satellite LLC is the owner of "Iridium" and all other Iridium trademarks, service marks and logos contained herein.

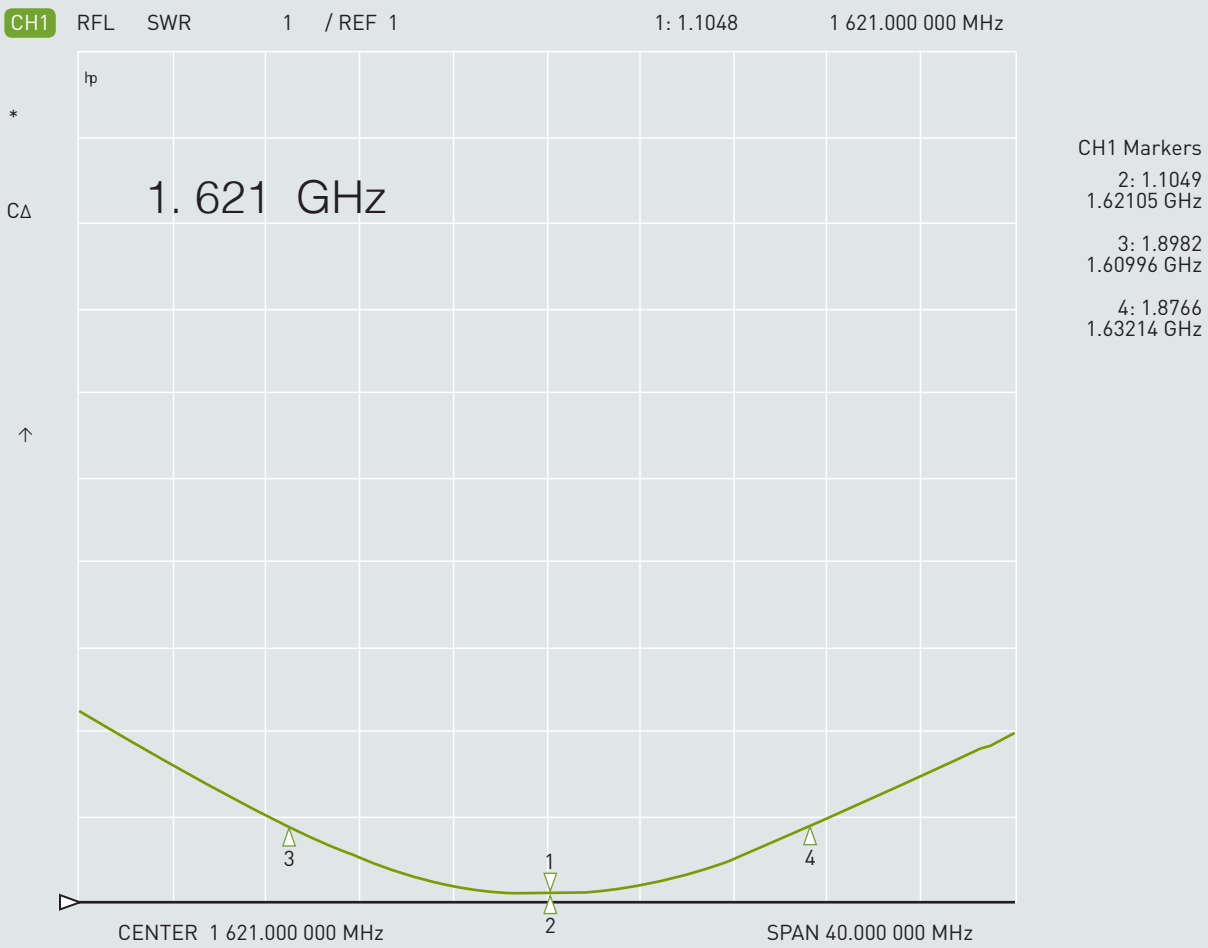
2. Specification

Electrical	
Frequency Range	1616Mhz~1626.5Mhz
Centre Frequency	1621.5MHz ± 5.25MHz
Bandwidth	15MHz
Impedance	50 Ohms
Polarization	RHCP
VSWR	1.5 Max (at centre frequency)
Connector	SMA(M)plug
Cable	RG-174
Termination	Ag (Environmentally-Friendly PB Free)
Operation Temperature	-40°C to + 85°C
Storage Temperature	-40°C to + 85°C
Relative Humidity	40% to 95%
Dimensions	40.5*38*12.3mm

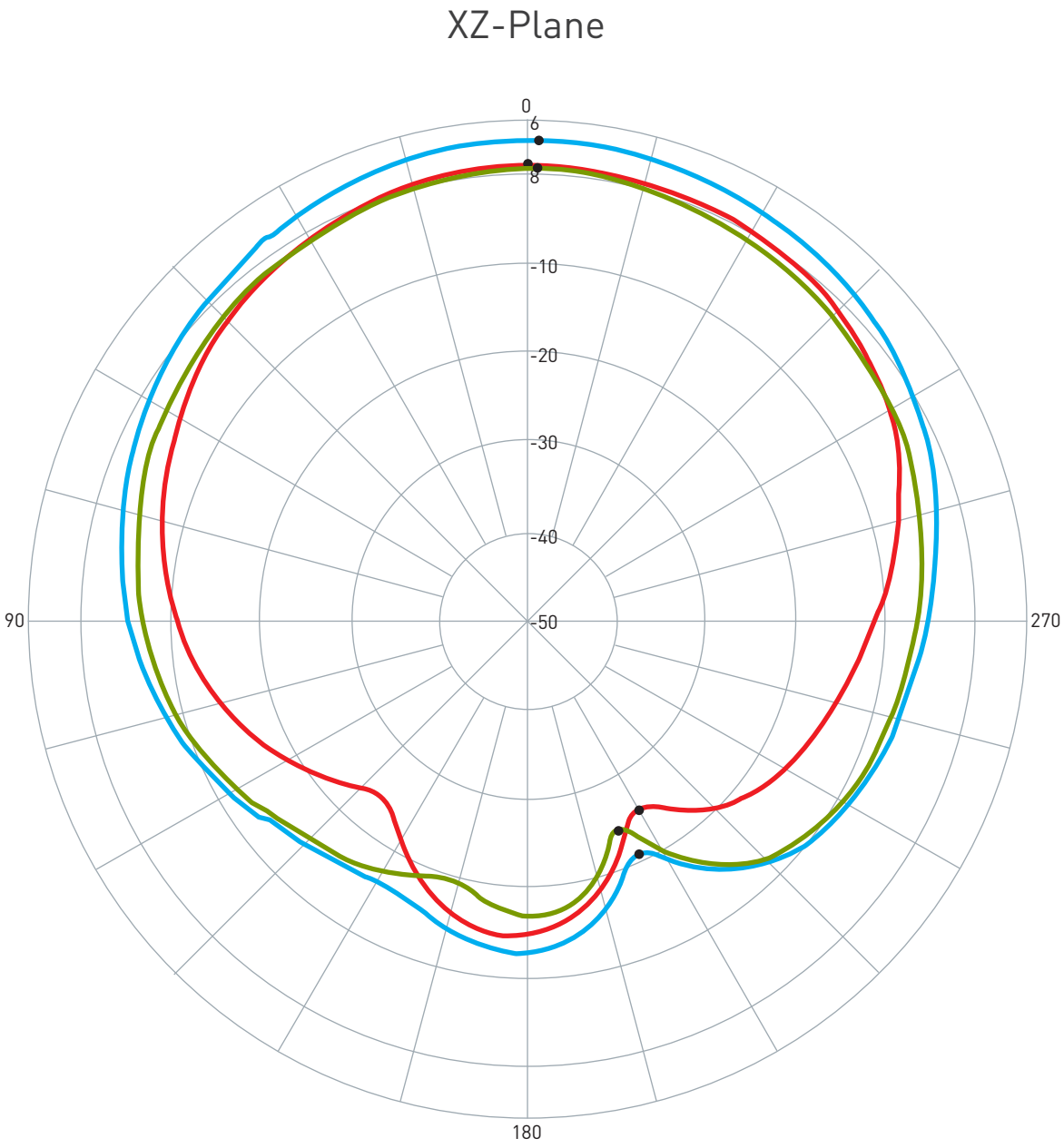
3. Performance Measurement and Results



4. VSWR

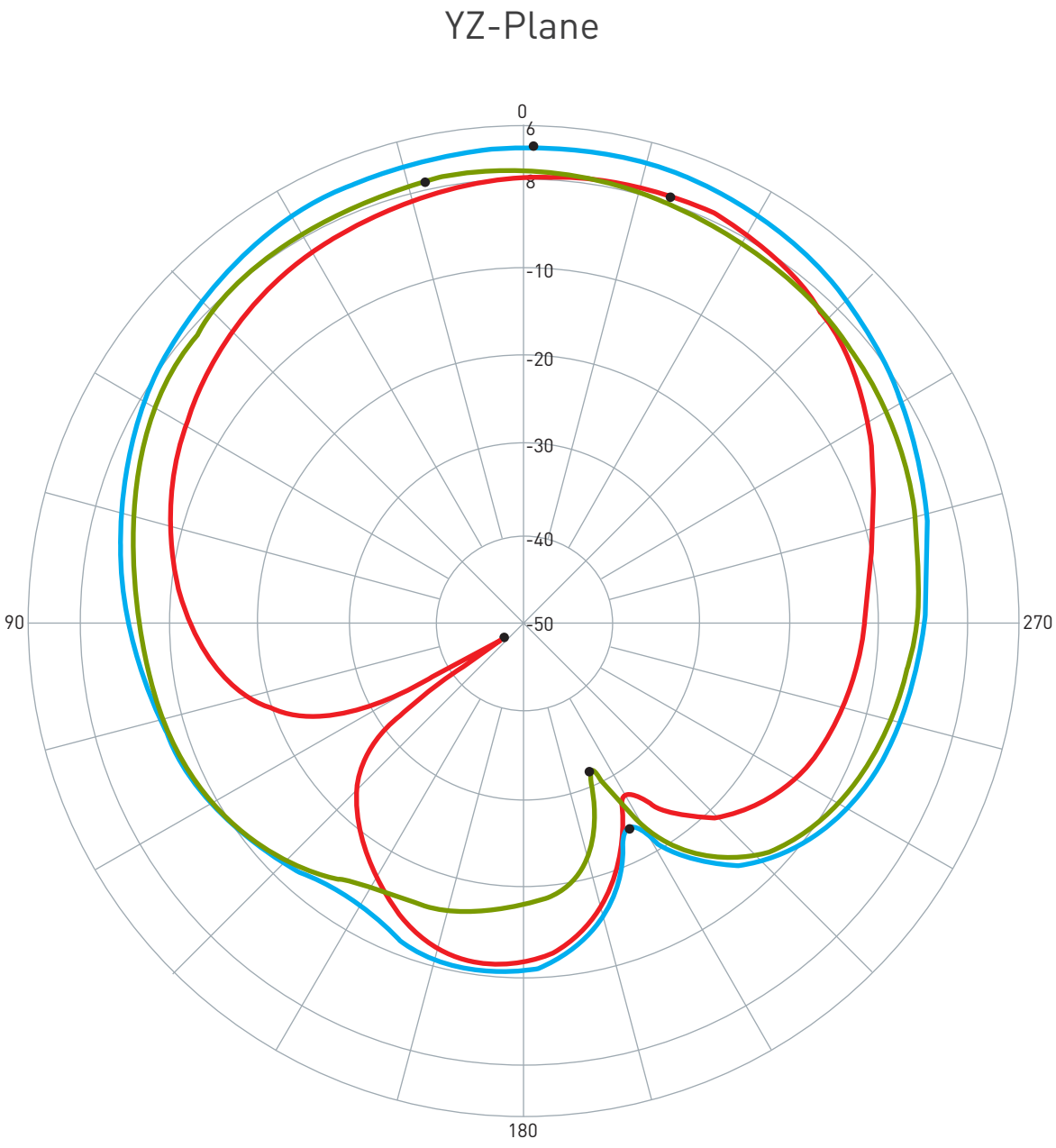

CH1 RFL SWR 1 / REF 1
1: 1.1048
1 621.000 000 MHz
1. 621 GHz
CH1 Markers
2: 1.1049
1.62105 GHz
3: 1.8982
1.60996 GHz
4: 1.8766
1.63214 GHz
CENTER 1 621.000 000 MHz
SPAN 40.000 000 MHz

5. Antenna Gain Chart



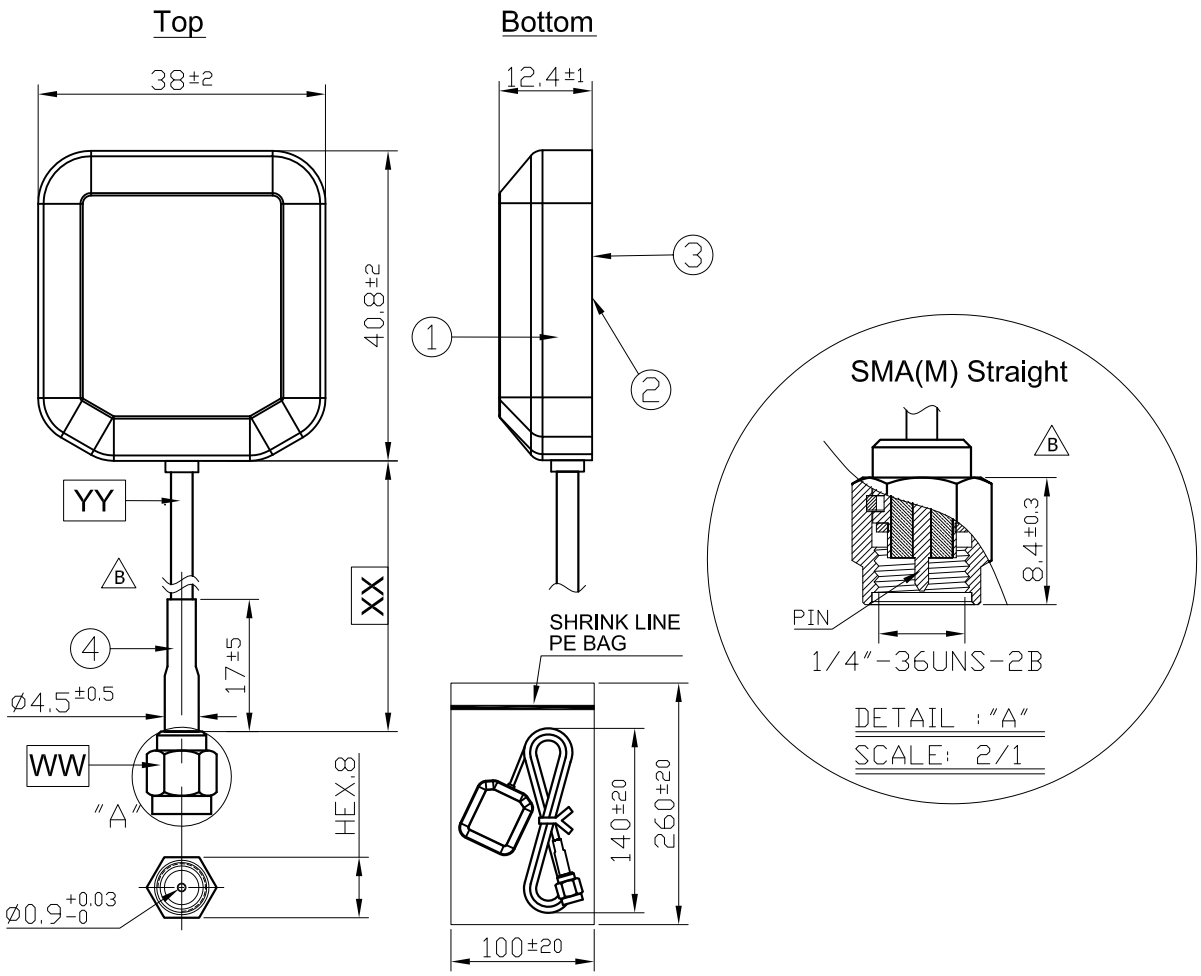
Pattern	Model No.	Test Mode	Freq (MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.
1	IAA.01.121111	XZ	1621.25	0.79 / 0.00	-25.44 / 210.00	-4.69	Ver
2	IAA.01.121111	XZ	1621.25	0.64 / 359.00	-24.51 / 203.00	-4.37	Hor
3	IAA.01.121111	XZ	1621.25	3.70 / 359.00	-21.07 / 205.00	-1.52	V+H

5. Antenna Gain Chart



Pattern	Model No.	Test Mode	Freq (MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.
1	IAA.01.121111	YZ	1621.25	0.61 / 341.00	-47.14 / 123.00	-5.35	Ver
2	IAA.01.121111	YZ	1621.25	0.78 / 13.00	-31.74 / 204.00	-3.74	Hor
2	IAA.01.121111	YZ	1621.25	3.48 / 359.00	-24.07 / 207.00	-1.46	V+H

6. Drawing

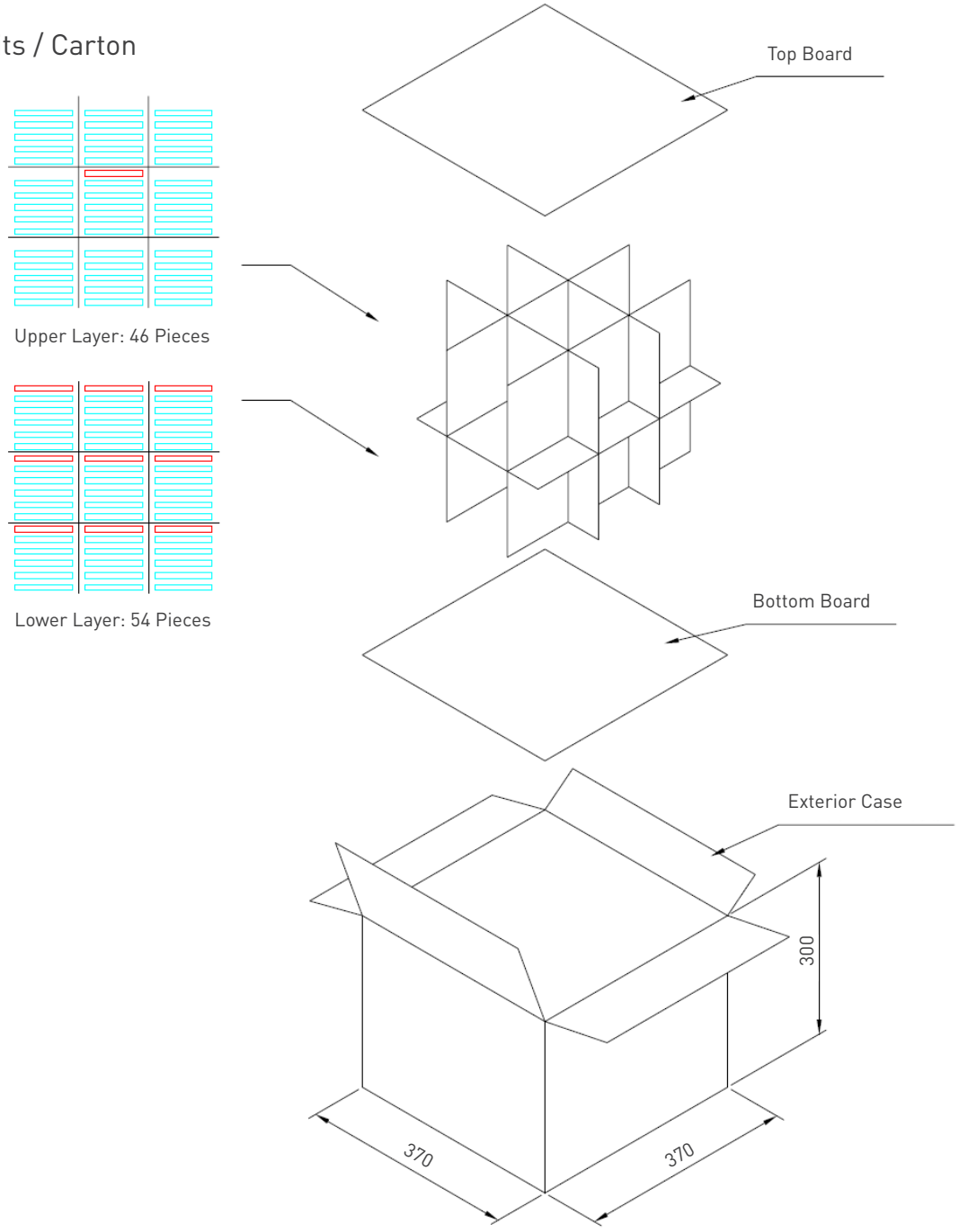


	Name	Material	Finish	QTY
1	Iridium Antenna Top	PC	Black	1
2	Iridium Antenna Bottom	PC	Black	1
3	Sticker	Coated Paper	Black	1
4	Heat Shrink Tube	PE	Black	1

	Name	Material	Finish	QTY
WW	Connector Type	SMA(M) Straight	Gold	1
XX	Cable Length	1200±30mm		1
YY	Cable Type	RG174	Black	1

7. Packing Details

100 Units / Carton



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