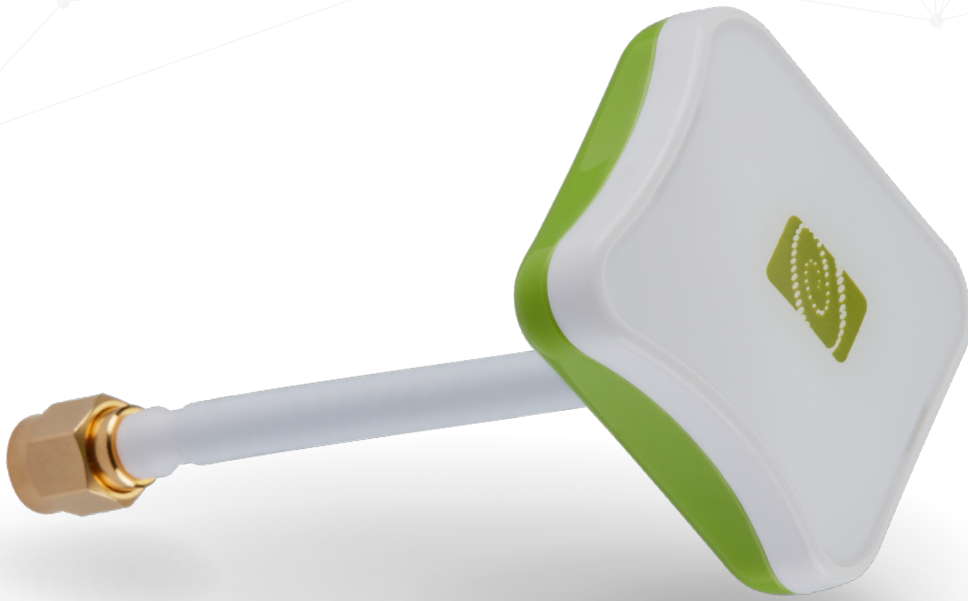




TAOGLAS®



Part No:

WCM.10.005QQ111

Description:

Stratus 5-5.8GHz 3dBi
SMA(M) Connector Mount Antenna
with Semi-Rigid Flexiform 402 Cable

Features:

5150-5850 MHz Wi-Fi Antenna
Designed for UAV / Drone Applications
Connector Mount
Right Hand Circularly Polarized
IP67 Rating
Dimensions: 30.7x34.9x17mm
Cable: 50mm SS402 Coaxial Cable
Connector: RP-SMA(M)



Datasheet

Contents

1	Introduction	3
2	Specifications	4
3	Antenna Characteristics	5
3.1	Return Loss	5
3.2	Efficiency	5
3.3	Average Gain	6
3.4	Peak Gain	6
4	2D Radiation Pattern	7
4.1	Antenna Test Set Up	7
4.2	2D Radiation Pattern	8
4.3	3D Radiation Pattern	9
5	Axial Ratio	10
6	Mechanical drawing	11
7	3D Model	12
8	Packaging	13

Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein.

Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

Copyright © Taoglas Ltd.

1 Introduction



The Taoglas Stratus WCM.10 antenna is an external connector mount antenna designed for UAV / Drone applications operating from 5150-5850MHz. The Stratus comes in a compact size, at only 34.8 * 30.7 * 17 mm, enabling flexibility of integration. The high efficiency, of nearly 70%, provided by this antenna allows it to meet the high throughput demands of drone applications, especially high definition FPV video streams.

Right Hand Circular Polarization (RHCP) and an optimized omnidirectional radiation pattern helps ensure excellent performance regardless of device orientation. The antenna can be use as either Tx or Rx and includes a high quality, low loss, SS402 semi-rigid cable, frequently used for military and commercial aerospace applications. The cable can be bent to a fixed orientation for ease of installation on either the UAV or goggles and headsets

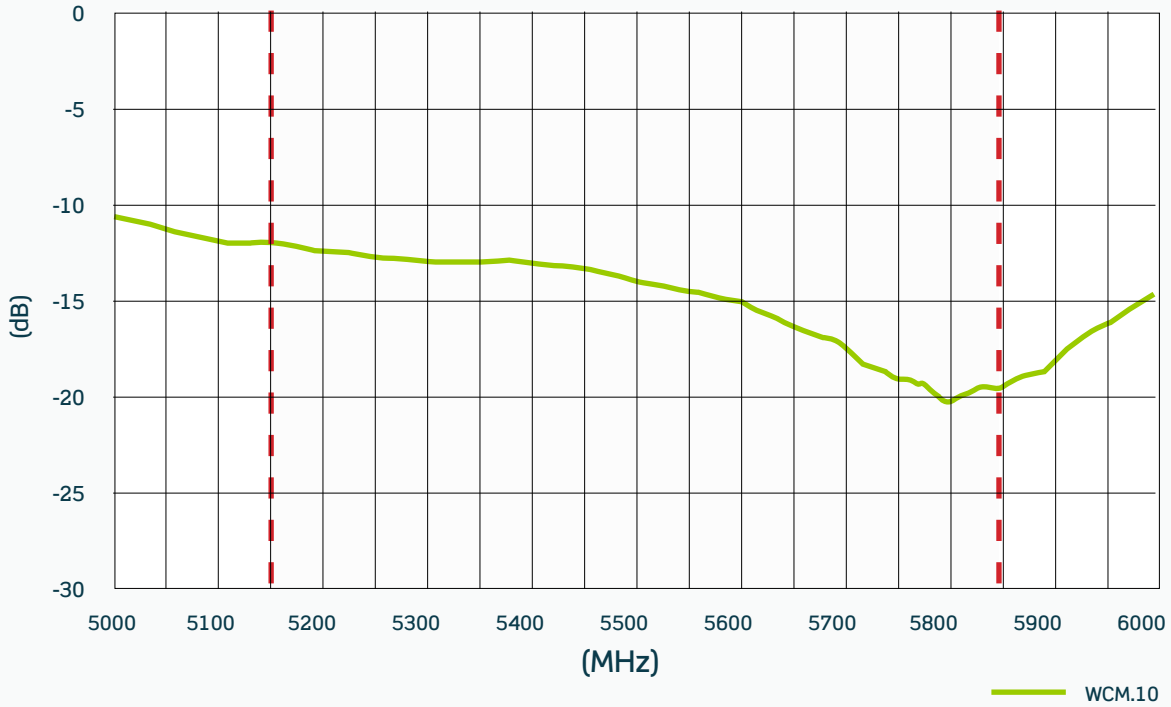
Cable length and connector types on this antenna are customizable. Taoglas can also customize and test antennas on your UAV in any one of our worldwide facilities subject to NRE or MOQ. Contact your regional Taoglas sales office for support.

Electrical *		
Frequency	5150 MHz	5850 MHz
Efficiency (%)	71	63
Average Gain (dB)	-1.6	-2
Peak Gain (dBi)	3.8	3.2
Return Loss (dB)	<-10	<-15
Polarization	RHCP	Linear
Axial ratio at zenith	<1	<7
Impedance	50Ω	
Mechanical		
Cap Material	PMMA	
Housing Material	ASA	
Dimensions (mm)	30.7 * 34.8 * 17	
Color	White & Green	
Connector	RP-SMA(M)ST	
Cable	50mm SS402	
Weight	17g	
IP Rating	IP67	
Environmental		
Operating and Storage Temperature	-40°C to +85°C	
Humidity	Non-condensing 65° C 95% RH	

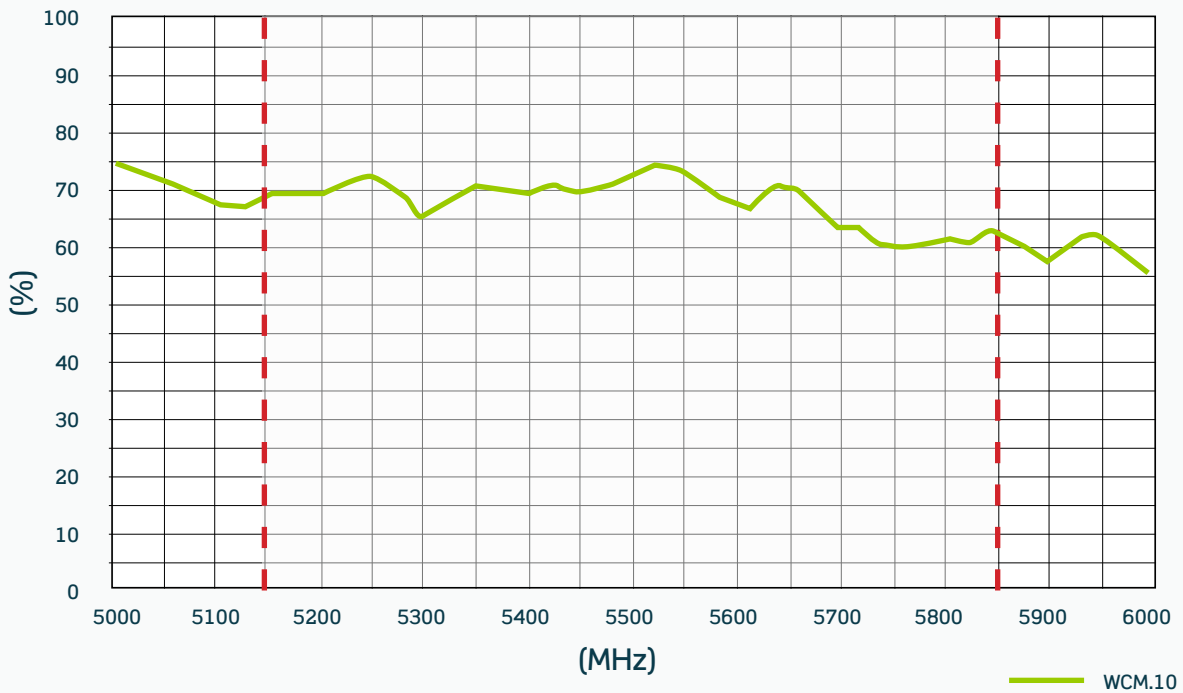
*Measurements taken in Free Space

3 Antenna Characteristics

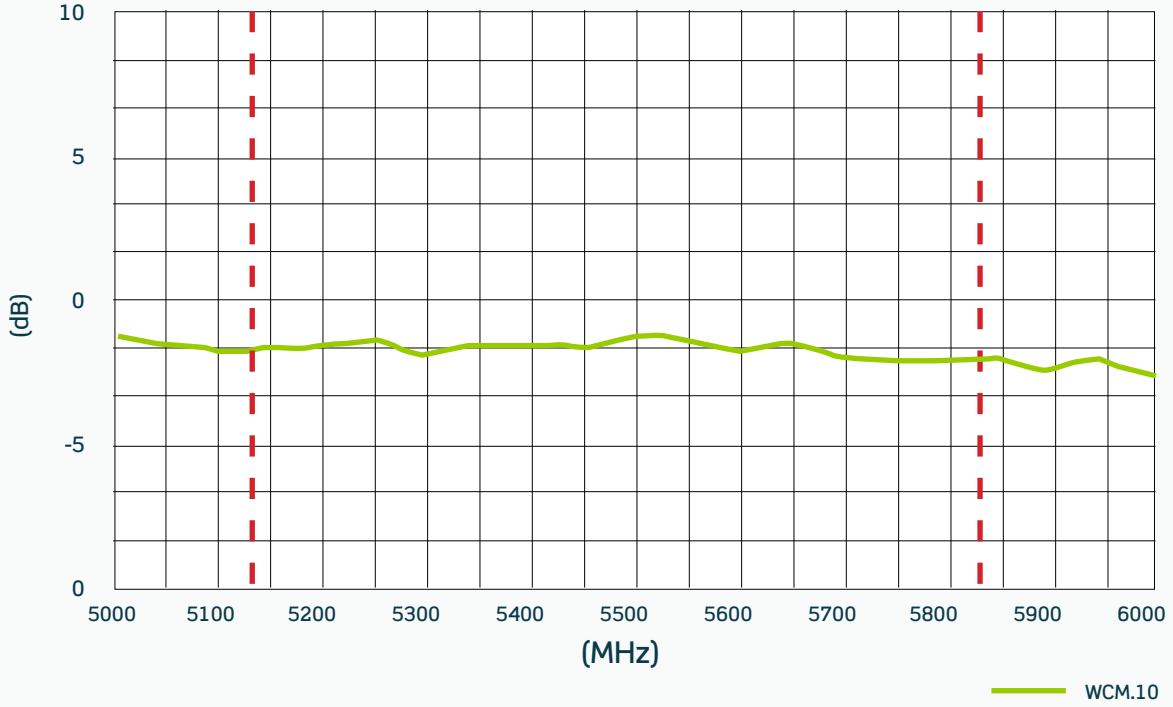
3.1 Return Loss



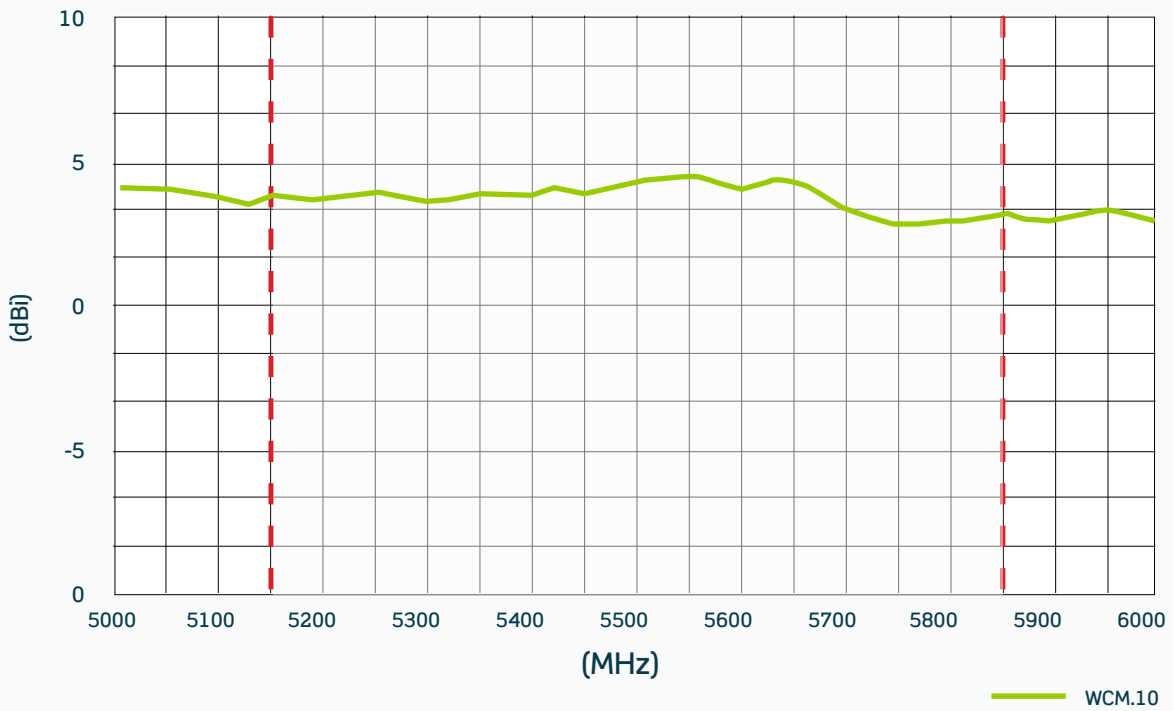
3.2 Efficiency



3.3 Average Gain



3.4 Peak Gain



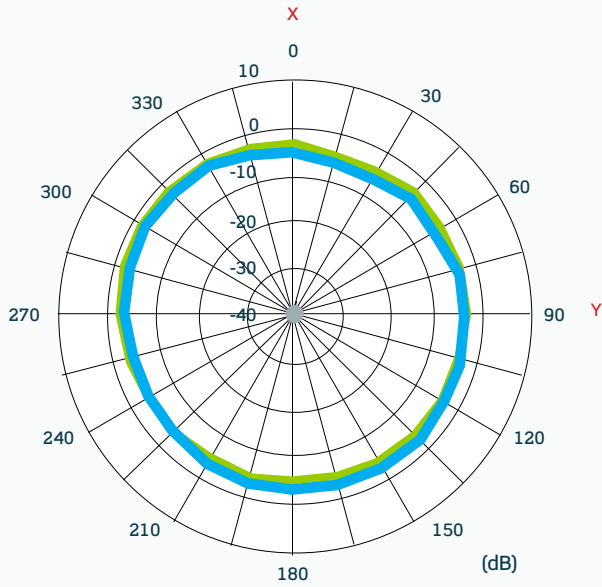
4 2D Radiation Pattern

4.1 Antenna Test Set Up

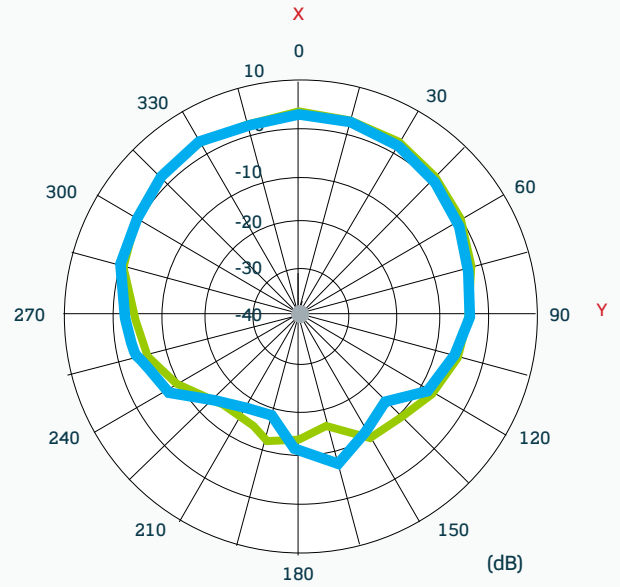


4.2 2D Radiation Pattern

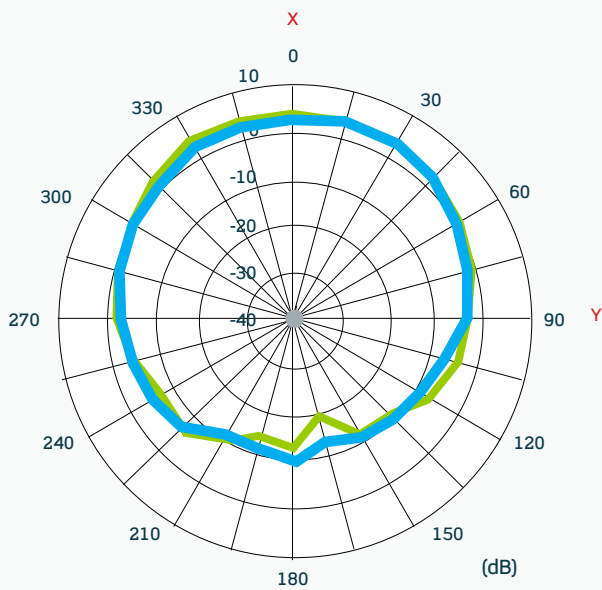
XY Plane



XZ Plane



YZ Plane

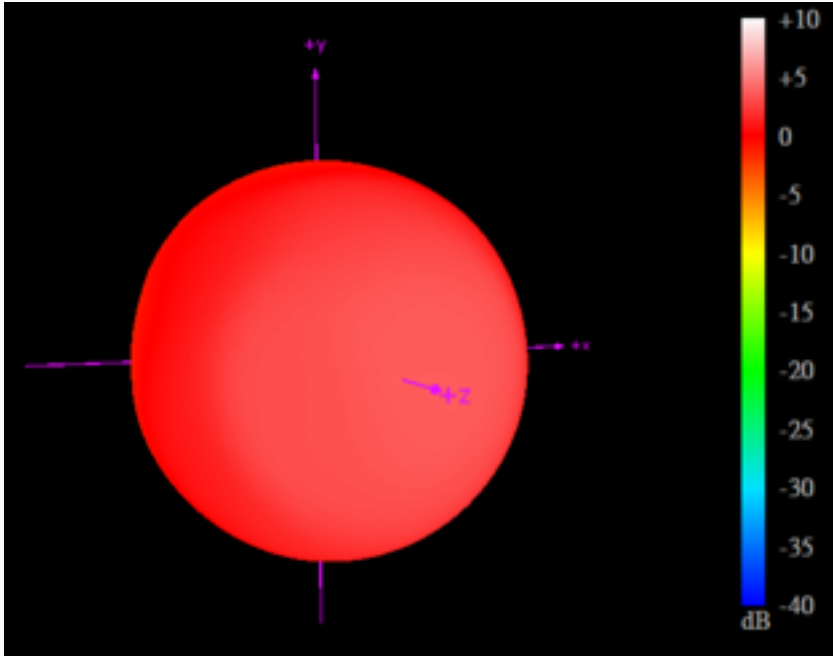


Key:

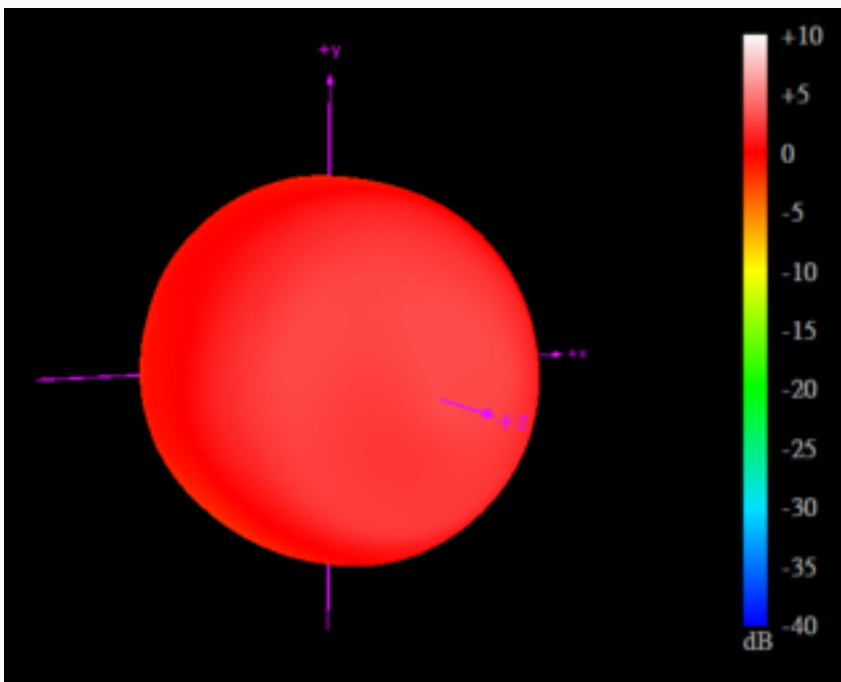
- 5150MHz
- 5850MHz

4.3 3D Radiation Pattern

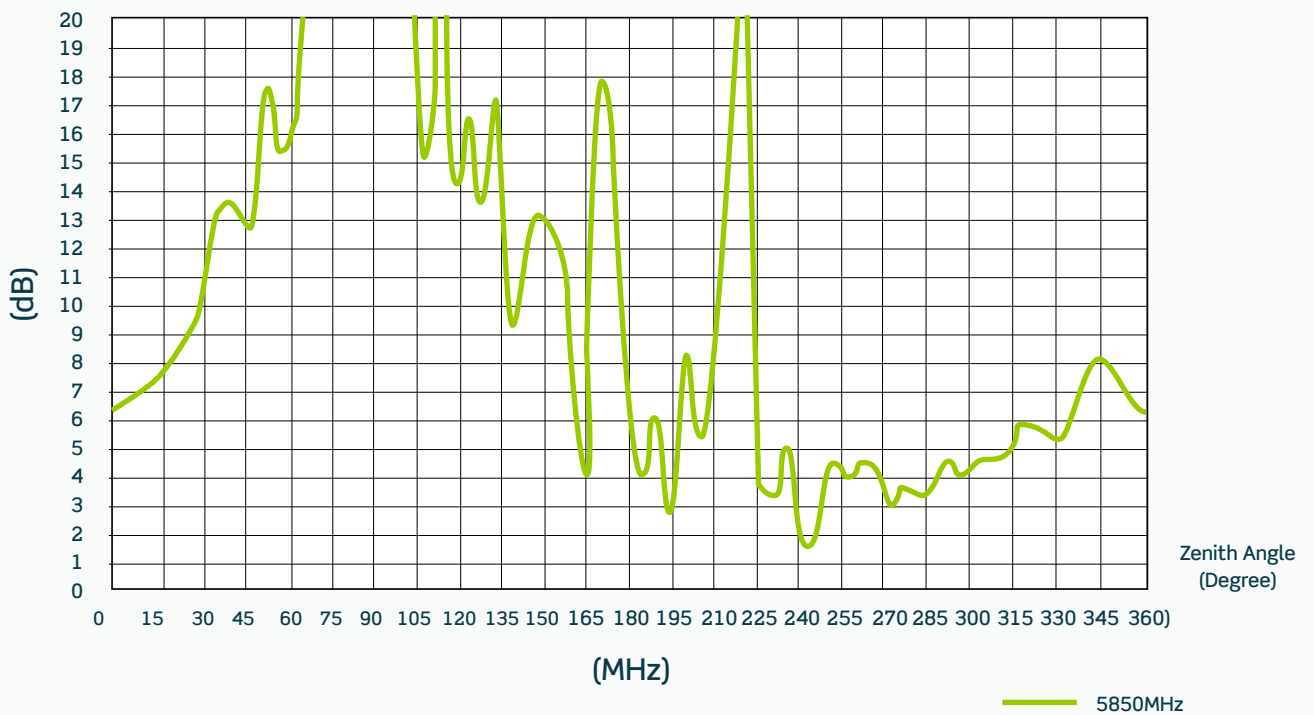
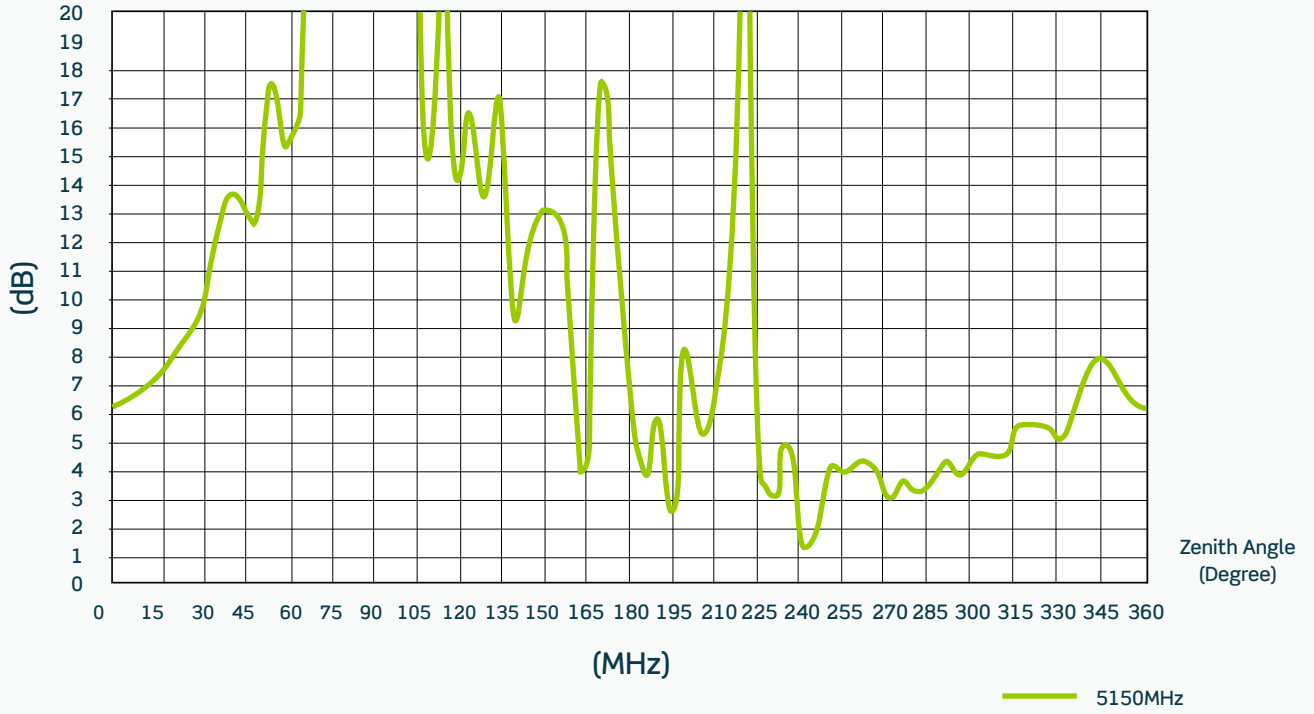
5150MHz



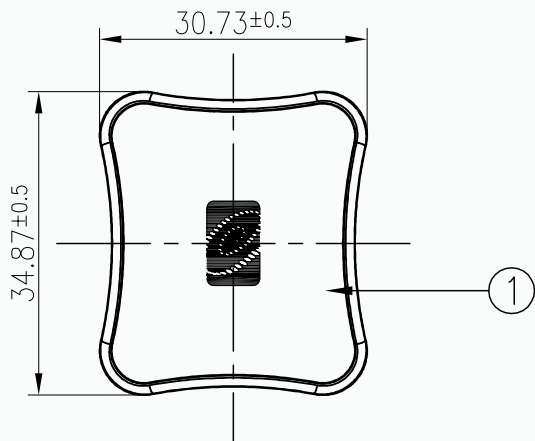
5850MHz



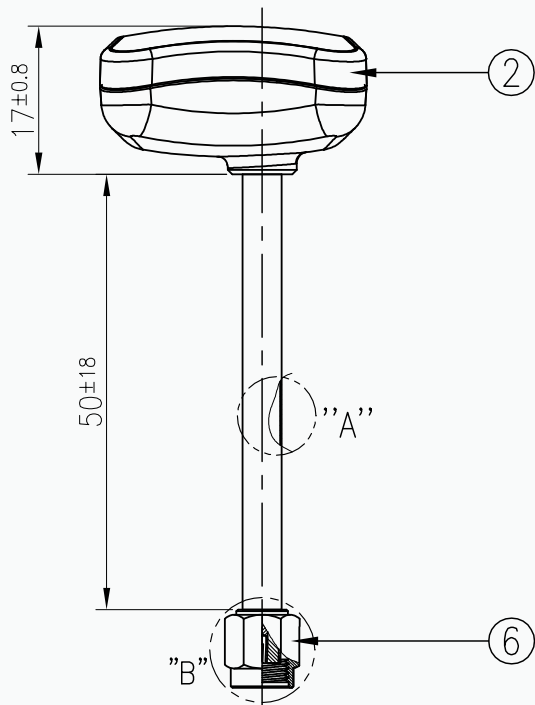
5 Axial Ratio



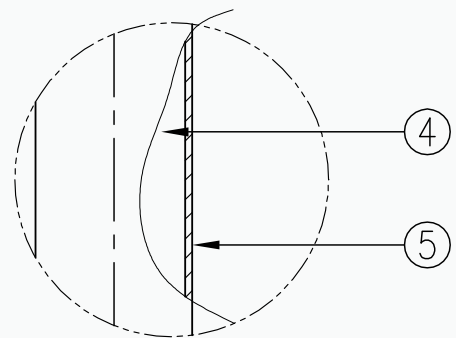
6 Mechanical Drawing (Unit: mm)



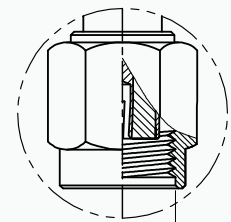
Front View



Side View

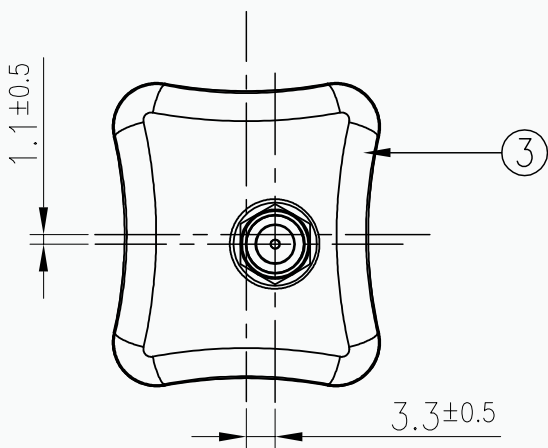


Detail A
Scale:4:1



1/4-36UNS-2B

Detail B
Scale:2:1

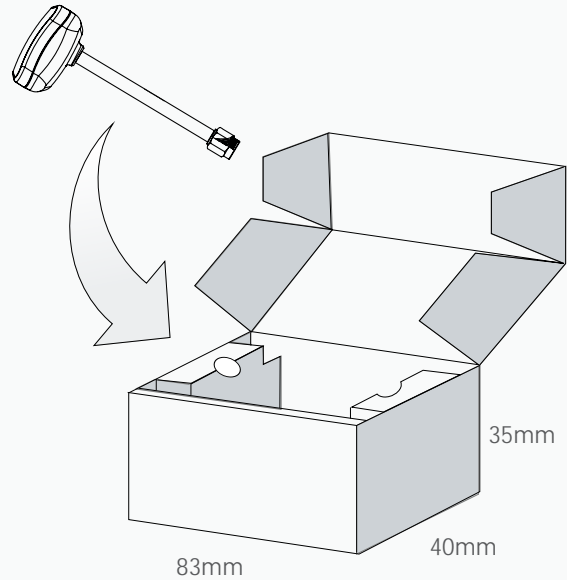


Back View

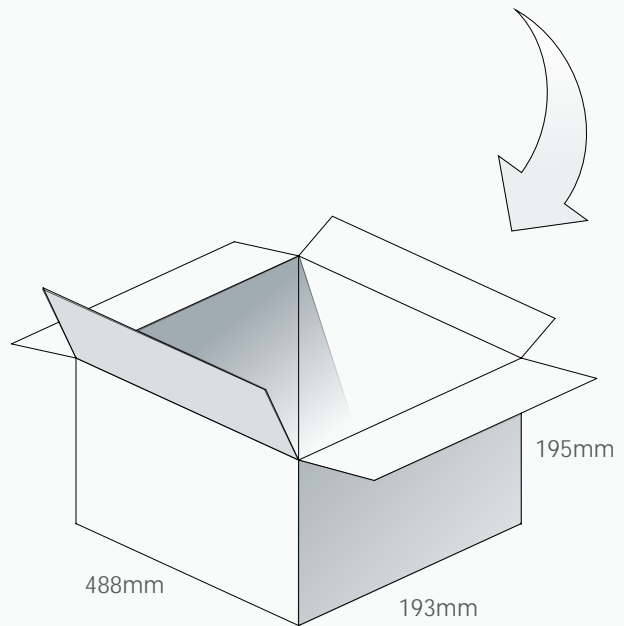
	Name	Material	Finish	QTY
1	Top Cap	PMMA	Transparent/Bottom White	1
2	Top Housing	ASA	White	1
3	Bottom Housing	ASA	Green	1
4	SS402 Coaxial Cable	FEP	Blue	1
5	Heat Shrink Tube	EVA	White	1
6	RP-SMA(M)ST	Brass	Au Plated	1

8 Packaging

1 pcs WCM.10.005QQ111 per box
Box Dimensions - 35*40*83mm
Weight - 29.5g



110 pcs WCM.10.005QQ111 per carton
Carton Dimensions - 488*193*195mm
Weight - 3.75kg





Wexford, Ireland - Group Headquarters

Unit 5 Kilcannon Business Park
Old Dublin Road
Enniscorthy, Co. Wexford
Y21 XW56, Ireland
+353 53 9169500
emeasales@taoglas.com

Dublin, Ireland

DCU Alpha, Innovation Campus
Old Finglas Road
Glasnevin, Dublin 11, Ireland
emeasales@taoglas.com

CA, United States

8375 Camino Santa Fe, Suite A & B
San Diego, CA 92121
USA
+1 858 450 0888
nasales@taoglas.com

MN, United States

530 N 3rd St., Suite B10
Minneapolis, MN 55401-1256
USA
+1 858 450 0888
nasales@taoglas.com

Germany

Erika-Maan-Straße 25
80636 München, Germany
+49 89 3803 7426
emeasales@taoglas.com

Taoyuan, Taiwan

No.2-2, Ln. 66, ZhongShan 1st Rd.
Bade City, Taoyuan City 33454
Taiwan, ROC
+886 3 3681223
asiasales@taoglas.com

Tainan, Taiwan

4F.-2, No.15, Guoji Road, Xinshi District,
Tainan City 744, Taiwan, ROC
+886 3 3681223
asiasales@taoglas.com

Shenzhen, China

Unit 509, Haiwang Star Building
Dongbin Road & Haibin Road
Nanshan District
Shenzhen 518001
China
+86 (755) 86538292
cnsales@taoglas.com

Ireland
ISO 9001:2008
Certified



Taiwan
ISO 9001:2008
Certified



Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9