

# **SPECIFICATION**

Part No. : **MB.200.C** 

Product Name : Magneto

Features : 3 Way Base Mount for LTE or WIFI MIMO 2\*2 antennas

- Magnetic Mount

- Wall Mount

- Desktop Mount

SMA(F) Jacks for Antennas

SMA(M)Straight Plug on Cable

Standard RG316 1 meter cable length

Dimensions 80mm \*96mm \* 25mm

RoHS compliant





Desk Top/ Magnetic Mount





### 1. Introduction

The MB.200 is a sturdy 3 way base mount for LTE or WIFI MIMO 2\*2 Antennas. The standard base version comes with high quality 1 meter small diameter Teflon jacket RG316 cable to allow for flexibility of placement. The base has undergone extensive pull force testing.

The base SMA connectors where the antenna elements connect are SMA(F), so the mating antenna needs to be SMA(M) straight connector type. The base cable itself has a SMA(M) connector. The cable length and cable connector types are customizable, subject to MOQ. The connector can be customizable on the base itself subject to NRE and MOQ.

#### Options

- Magnetic
- Desktop
- Wall

#### Magnetic Mount

With six super-magnets embedded, the base mounts permanently to metal surfaces

#### Wall Mount

Mounting holes in the base make it easy to mount on a wall

#### Desktop

EVA foam under the base ensures a good grip for desktop use

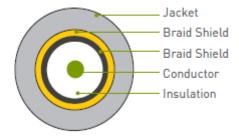
In practice any antenna model with a standard SMA(M) connector can be used with this base. Taoglas has for 2G/3G/4G applications the TG.35, TG.30, TG.09, or TG.08 For Dual-band WiFi we recommend the TG35 or the GW71.

Contact your regional Taoglas sales office for support.

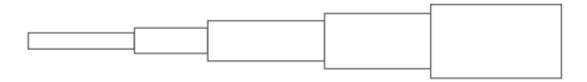


## 2. RG316 Cable Specification

### 2.1 Drawing - Cross Section



### 2.2 Structure and Dimensions



#### Conductor

- Material Silver
   Coated Copper
   Clad Steel
- 26AWG (7/0.175mm)
- Diameter -0.53mm

#### Insulation

- Material FEP
- Avg. Thickness
   0.51mm
- Diameter
   1.53±0.03mm
- Colour Clear

#### Braid Shield

- Material
- Silver Coated
   Copper
- Structure -16/5/0.10mm
- Coverage 95%
- Diameter 1.98±
   0.05mm

#### **Braid Shield**

- Material Silver
   Coated Copper
- Structure -
- 16/5/0.10mm
- Coverage 86%
- Diameter 2.38
   ± 0.05mm

#### Jacket

- Material
   FEP
- Avg. Thickness 0.30mm
- Diameter 2.90±
   0.10mm
- Colour Brown



Rating Temp Voltage: 105°C 30V

 Insulation Resistance:
 3000 MΩ-Km (Min)

 Conductor Resistance:
 302 Ω/Km 20°C (Max)

Dielectric Strength: AC 1 KV/Minute

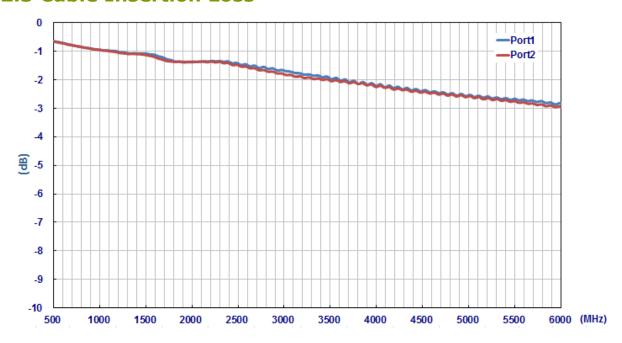
 $\begin{tabular}{lll} \mbox{Spark Test} & 5.0 \mbox{ KV} \\ \mbox{Nom. Impedance} & 50 \pm 3 \mbox{ }\Omega \\ \mbox{Nom. Capacitance} & 95.8 \pm 3 \mbox{ pF/m} \\ \end{tabular}$ 

Nom. Vel. of Prop. 69% VSWR (0-6 GHz) Max 1.3

Attenuation	2GHz	2.4GHz	3GHz	4GHz	5GHz	6GHz
(dB / 1M)	1.35	1.5	1.62	1.91	2.2	2.7



## 2.3 Cable Insertion Loss





## 2.4 Electrical & Physical Specification

MB200 Port1								
Attenuation	500MHz	1000MHz	2000MHz	3000MHz	4000MHz	5000MHz	6000MHz	
S12	-0.64	-0.94	-1.39	-1.68	-2.21	-2.54	-2.84	
Nom. Impedance		50 Ohm						
MB200 Port1								
Frequency (MHz)	500MHz	1000MHz	2000MHz	3000MHz	4000MHz	5000MHz	6000MHz	
S12	-0.66	-0.96	-1.36	-1.81	-2.25	-2.58	-2.96	
Nom. Impedance		50 Ohm						
MECHANICAL								
Casing			ABS+PC					
Coaxial Cable			RG316					
Cable Length			1 meters					
Connector			SMA(M)ST					
Connector Max. Torque			0.9 Nm					
Weight			220 g					
Magnetic mount (unit)			1.0 kgf					
ENVIRONMENTAL								
Operation Temperature			-40°C to 85°C					
Storage Temperature			-40°C to 85°C					
Humidity			Non-condensing 65°C 95% RH					

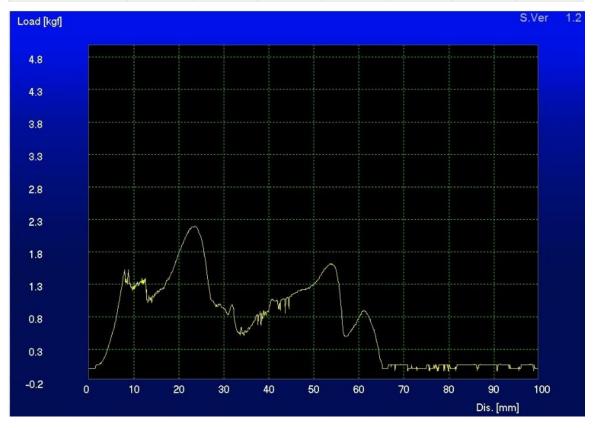


# 3. Magnetic Pull Force (Kilogram-Force (kgf)



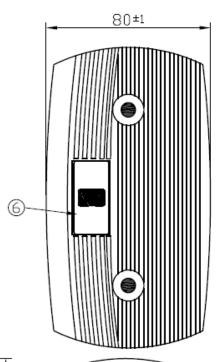
Horizontal Pull Force Breakdown: 1.28Kgf

Distance(mm)	10	20	30	40	50	60	70	
Pulling force(Kgf)	1.28	1.79	0.92	0.93	1.3	0.79	0.06	

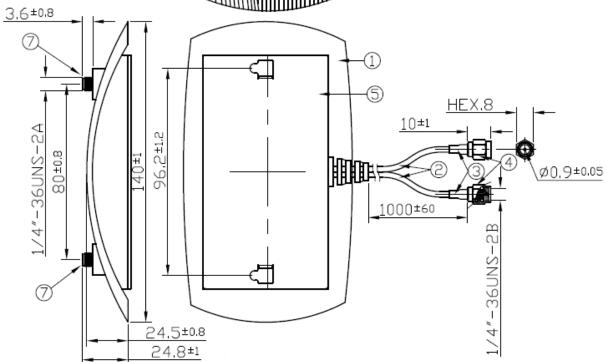




# 4. Mechanical Drawing



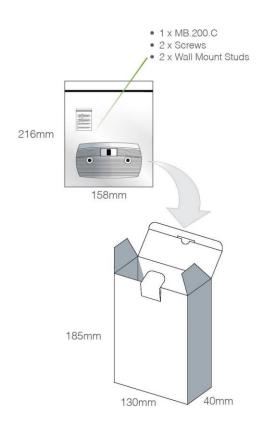
	Name	P/N	Material	Finish	QTY
1	Housing	lousing 000114E000087A ABS		Black	1
2	RG316 Coaxlal Cable	301614E000087A	FEP	Brown	2
3	Heat Shrink Tube	001313D000087A	PE	Black	2
4	SMA(M)ST	200212L010087A	Brass	Gold	2
5	MB.200 Bottom Foam	001014E050087A	EVA+T4000	Black	1
6	MB.200 Logo Label 003	001014E040087A	Coated Paper	03 <sub>Black</sub>	1
7	SMA(F)BH ST	200214J000087A	Brass	Gold	2





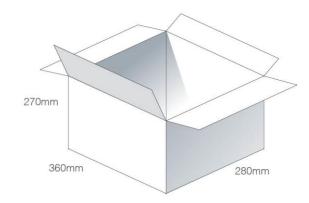
# 5. Packaging

1 MB.200.C per PE bag Bag Dimensions - 216cm\*158cm 1 PE bag per Box Box Dimensions - 185\*130\*40mm Total Weight - 180g

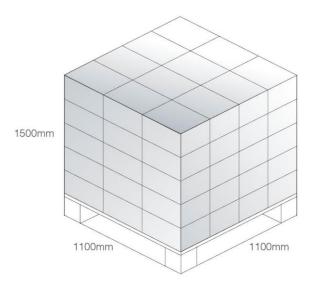




19 boxes per carton Carton Dimensions - 360\*280\*270mm Weight - 5Kg



Pallet Dimensions 1100\*1120\*1500mm 60 Cartons per Pallet 12 Cartons per layer 5 Layers





# **6. Mounting Type**

## **6.1 Wall Mount installation**



Reference Antenna: TG.35.0113

## **6.2 Magnet Mount installation**



Reference Antenna: TG.35.0113



## **6.3 Desktop Mount installation**

