

# **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



Wall 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

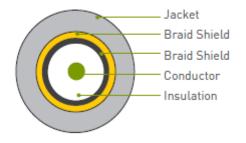
In practice any antenna model with a standard SMA(M) connector can be used with this base. Taoglas has for 2G/3G/4G applications the TG.35, TG.30, TG.09, or TG.08 For Dual-band WiFi we recommend the TG35 or the GW71.

Contact your regional Taoglas sales office for support.

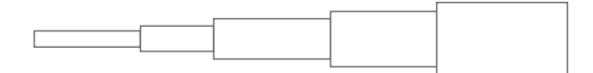


## 2. RG316 Cable Specification

### 2.1 Drawing – Cross Section



### **2.2 Structure and Dimensions**



#### Conductor

- Material Silver Coated Copper Clad Steel
- 26AWG Diameter - 1.53±0.03mm (7/0.175mm)

Insulation

- 0.51mm

Colour - Clear

Material - FEP

• Diameter -0.53mm

#### **Braid Shield**

#### Material - Silver Coated

- Avg. Thickness 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

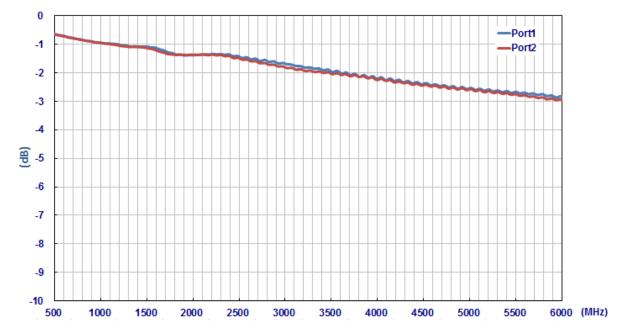
#### Jacket

- 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      |        |      |      |      |      |  |  |  |  |
| Spark Test             | 5.0 KV              |        |      |      |      |      |  |  |  |  |
| Nom. Impedance         | 50 ± 3 Ω            |        |      |      |      |      |  |  |  |  |
| Nom. Capacitance       | 95.8 ± 3 pF/m       |        |      |      |      |      |  |  |  |  |
| 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

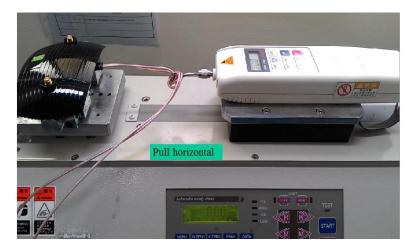


## 2.4 Electrical & Physical Specification

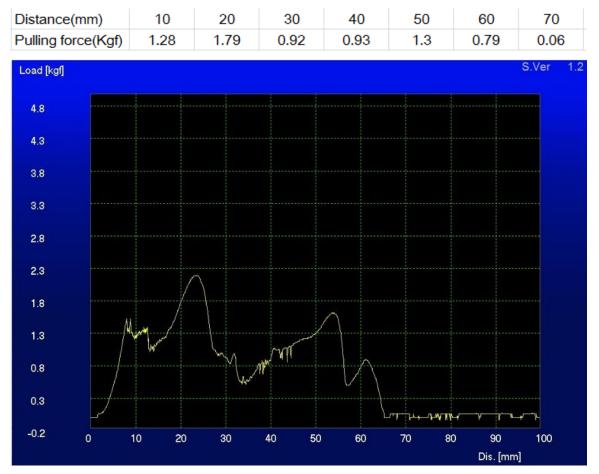
| MB200 Port1           |        |         |                            |         |         |         |         |  |  |  |  |  |
|-----------------------|--------|---------|----------------------------|---------|---------|---------|---------|--|--|--|--|--|
| Attenuation           | 500MHz | 1000MHz | 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





Materla

ABS+PC

FEP

ΡE

Brass

Brass

EVA+T4000

Coated Paper

Finish

Black

Brown

Black

Gold

Black

Gold

QTY 1

2

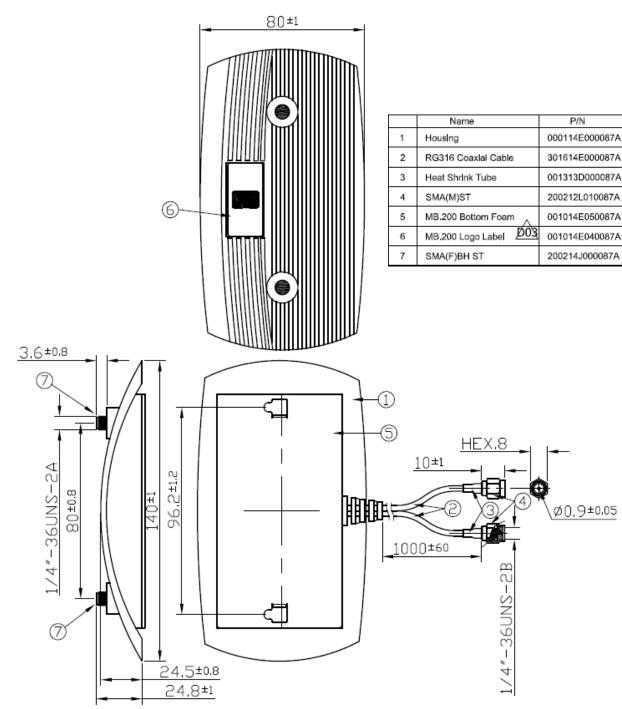
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1

1

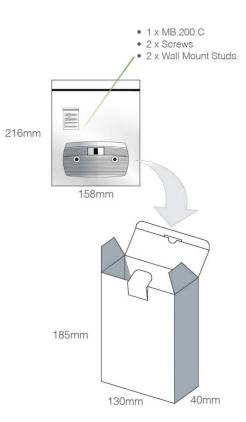
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## 4. Mechanical Drawing





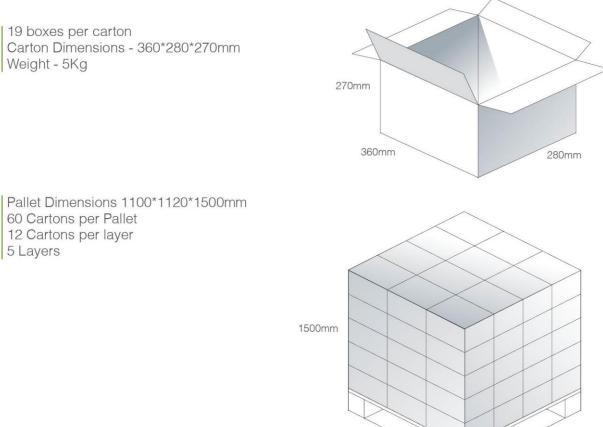
## 5. Packaging



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



1100mm



1100mm

60 Cartons per Pallet



## 6. Mounting Type

### **6.1 Wall Mount installation**



Reference Antenna: TG.35.0113

### 6.2 Magnet Mount installation



Reference Antenna: TG.35.0113