



## PRODUCT DATASHEET

# MG-DY046M

|                    |                                                                           |
|--------------------|---------------------------------------------------------------------------|
| <b>Type</b>        | <b>Combination Antenna 3in1</b><br><b>Glonass/GPS+ + GSM/LTE+ GSM/LTE</b> |
| <b>Frequencies</b> | 806 ~2690 / 1575 ~1610 MHz                                                |
| <b>Mounting</b>    | Screw                                                                     |
| <b>Brand Name</b>  | <b>MG ANTENNAS</b>                                                        |



| Revision # | Content         | Page | Date       |
|------------|-----------------|------|------------|
| 0          | First, document | -    | 04.02.2019 |

## 1. SPECIFICATION

### 1.1 Electrical Specifications

**Cable 1- GSM / LTE (MAIN)**

|                          |                              |
|--------------------------|------------------------------|
| <b>Frequency</b>         | 806~960 MHz<br>1710~2690 MHz |
| <b>Polarization</b>      | Linear                       |
| <b>Peak Gain</b>         | 2 dBi                        |
| <b>Max. Input power</b>  | 25 W                         |
| <b>Radiation pattern</b> | Omni-Directional             |
| <b>VSWR</b>              | 2 :1                         |
| <b>Impedance</b>         | 50 $\Omega$                  |

**Cable 2- GSM / LTE (AUX)**

|                          |                              |
|--------------------------|------------------------------|
| <b>Frequency</b>         | 806~960 MHz<br>1710~2690 MHz |
| <b>Polarization</b>      | Linear                       |
| <b>Peak Gain</b>         | 2 dBi                        |
| <b>Max. Input power</b>  | 25 W                         |
| <b>Radiation pattern</b> | Omni-Directional             |
| <b>VSWR</b>              | 2 :1                         |
| <b>Impedance</b>         | 50 $\Omega$                  |

**Cable 3- GPS/GLONASS**

|                          |                   |
|--------------------------|-------------------|
| <b>Frequency</b>         | 1575.42 ~1610 MHz |
| <b>Polarization</b>      | RHCP              |
| <b>Supply Current</b>    | 5-15mA            |
| <b>Noise-Figure</b>      | 2 dB              |
| <b>LNA Gain</b>          | 28 $\pm$ 2 dBi    |
| <b>Supply Voltage</b>    | 2.2-5.0V          |
| <b>Radiation pattern</b> | Hemispherical     |
| <b>Saw Filter</b>        | Pre-Filter        |
| <b>VSWR</b>              | 1.5:1             |
| <b>Impedance</b>         | 50 $\Omega$       |

## 1.2 Mechanical and Environmental Specification

|                                       |                                          |
|---------------------------------------|------------------------------------------|
| <b>Cable (type and length)</b>        | RG174, 1m or other*                      |
| <b>Connector</b>                      | SMA male or other*                       |
| <b>Housing Color</b>                  | Black                                    |
| <b>Mounting</b>                       | Screw                                    |
| <b>Dimensions</b>                     | 81.0 (Ø) x 14.6 (H) mm                   |
| <b>Operating/ Storage Temperature</b> | - 40 ~ + 85 °C                           |
| <b>Vibration</b>                      | 10 to 55MHz with 1.5mm amplitude 2 hours |
| <b>Ingress Protection</b>             | IP65-IP67 (exclude cable outlet)         |
| <b>Relative Humidity</b>              | Up to 95%                                |
| <b>Environmentally Friendly</b>       | ROHS Compliant                           |

\* Customizable Cable and Connector

## 2. DIMENSIONS

