



Explanation of Part Number

Preliminary – subject to change

WPMOD M5 N 3 XXX 10 0 S
(1) (2) (3) (4) (5) (6) (7) (8)

<p>(1) Product Type Antenna</p> <p>(2) Appearance Series M1(25x25) M2(18x18) M3(15x15) M4(12x12x6) M5(12x12x4)</p> <p>(3) Radome D: With Radome N: Without Radome</p> <p>(4) Voltage N: 0 V 1: 2.3 - 5.5V ± 0.5V</p> <p>(5) Cable Type N: 0 m 3: 1.13</p> <p>(6) Cable Length (in mm) 0: No cable type</p>	<p>(7) Connector Type 00 : No connector 01 : SMA Plug 02 : SMA RA Plug 03 : SMB Plug 04 : SMB RA Plug 05 : MCX Plug 06 : MCX RA Plug 07 : MMCX Plug 08 : MMCX RA Plug 09 : NBC Plug 10 : IPX Plug</p> <p>(8) Filter Type 0 : No 1 : SAW 2 : Dielectric</p> <p>(9) Remark S : Standard C : Custom requirements</p>
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2. Application

For antenna units used with or in automobiles (50Ω impedance).

Operating Condition

Temperature -40 to +90 °C
Humidity 10 to 95% RH

3. Appearance

Antenna Unit (with radome, connector, and cable)
Dimensions 15 X 15 x 7.55mm
Weight 4.9 ± 1g (typ.)

Storage Condition

Temperature -40 to +90 °C
Humidity 10 to 95% RH

Electrical Specification

- All values are defined at 25 ± 15°C, 65 ± 20%RH, power handling 1μ watt, air pressure 960 ± 100 HPA unless otherwise noted.
- Patch characteristics are measured with 50 x 50 mm ground plane in an anechoic chamber.

Patch

Characteristics	Specification
Center Frequency	1575.42 ± 1.023 MHz (when covered with a radome and measured by LNA ground plane)
Bandwidth (10dB return loss)	5 MHz min @ S11 <+ -10 dB
Gain at Zenith	0 dBic typ
Gain at 10° elevation	-8 dBic min
Polarization	R.H.C.P
Axial Ratio	3.0 dB typ

Filter / LNA*

Characteristics	Specification
Center Frequency	1575.42 ± 1.023 MHz
Gain	27 dB typ
Noise Figure	1.5 dB typ
Filter Out Off Band Attenuation	Dielectric **Saw
	7dB min fo ± 20MHz
	20dB min 30dB min fo ± 50MHz
	30dB min 35dB min fo ± 100MHz (fo=1575.42MHz)
Output V.S.W.R	2.0 max
Voltage	2.3 ~ 5.5V
Current	6.6mA @2.5V (typ)
	8.6mA @3V (typ)
	12.6mA @4V (typ)
	16mA @5V (typ)

* Note: Above table only applies to active antenna (option #3, 1).

Antenna Dimensions

