



# ANTENNA DATASHEET

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PN: AET245872RPSM-W

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## REVISION HISTORY

REV.	Description	Date
<b>1.0</b>	First release	Aug.30/2023



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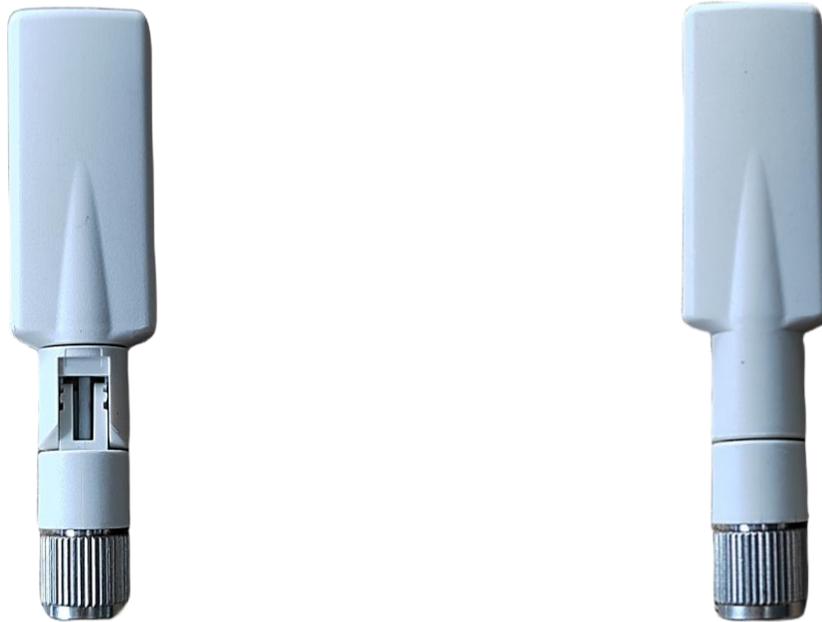
## 1. AET245872RPSM-W External Antenna

Based on AOT's patented technology, the Model AET245872RPSM-W Antenna features provides a high performance, off-board and RP-SMA feeding External antenna solution. It was designed for supporting 2400MHz-2490MHz/5150MHz-5850MHz/5925MHz-7125MHz bands applications including WIFI.

## 2. Features

The Model AET245872RPSM-W External Antenna is defined by the following features:

- Covering 2400MHz-2490MHz/5150MHz-5850MHz/5925MHz-7125MHz frequency
- Superior performance
- 3.3dBi@2.4GHz band;3.3dBi@5GHz band;4.4dBi@6GHz band
- Off-board, low profile design
- Low Cost, High performance



**Figure 1:** Model AET245872RPSM-W External Antenna



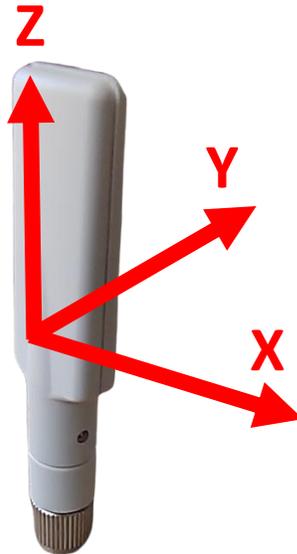
### 3. Specifications and Interface

Wireless Standard	IEEE 802.11.a/b/g/n/ac/ax/WIFI6E/WIFI7
Frequency Range	2400MHz-2490MHz/5150MHz-5850MHz/5925MHz-7125MHz
Peak Realized Gain(Max)	3.3dBi@2.4GHz;3.3dBi@5GHz;4.4dBi@6GHz
Realized Efficiency	>65%@2.4GHz;>81%@5GHz;>79%@6GHz
Return Loss	>10dB
Polarization	Linear Polarization
Axial Ratio	/
Radiation Pattern	Omni-directional
Feed Impedance	50Ω
Power Handling	30dBm
Antenna Structure	External Antenna
Feeding Description	Cable Feeding
Antenna Dimensions	69.3mm x 16.5mm x 10.3mm
Weight	10.5g
Temperature Range	Operating temperature: -40° C to +95° C (-40° F to +203° F) Storage temperature: -40° C to +95° C (-40° F to +203° F)



## 4. Radiation Patterns

Radiation patterns were taken with the antenna in testing Chamber



**Figure 2:** Model AET245872RPSM-W Measurement axes

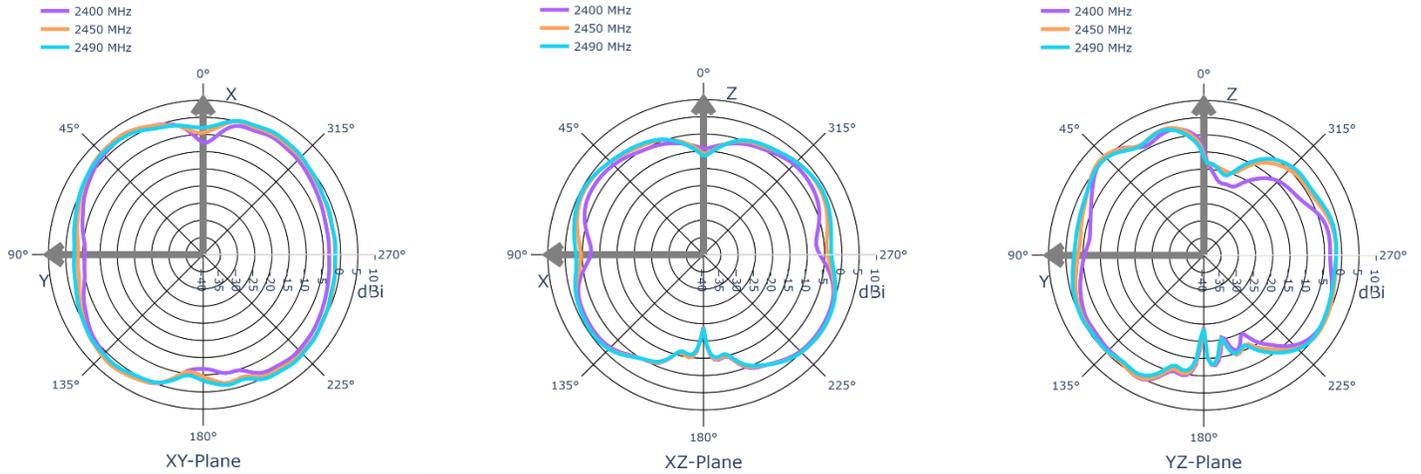


Figure 3: Model AET245872RPSM-W Measured Radiation Patterns at 2.4G

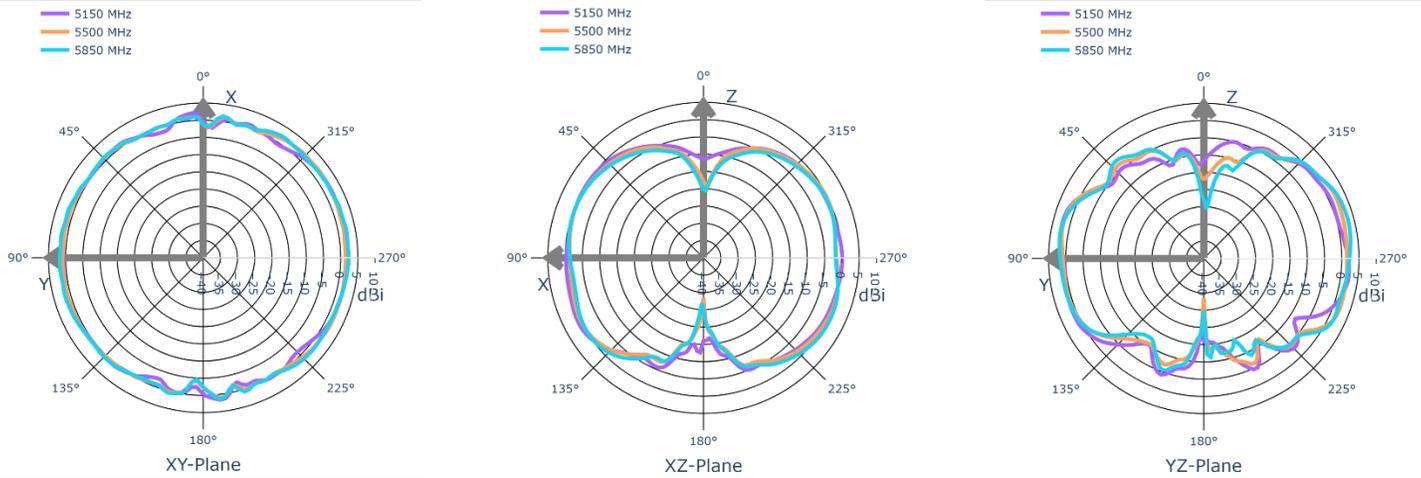


Figure 4: Model AET245872RPSM-W Measured Radiation Patterns at 5G

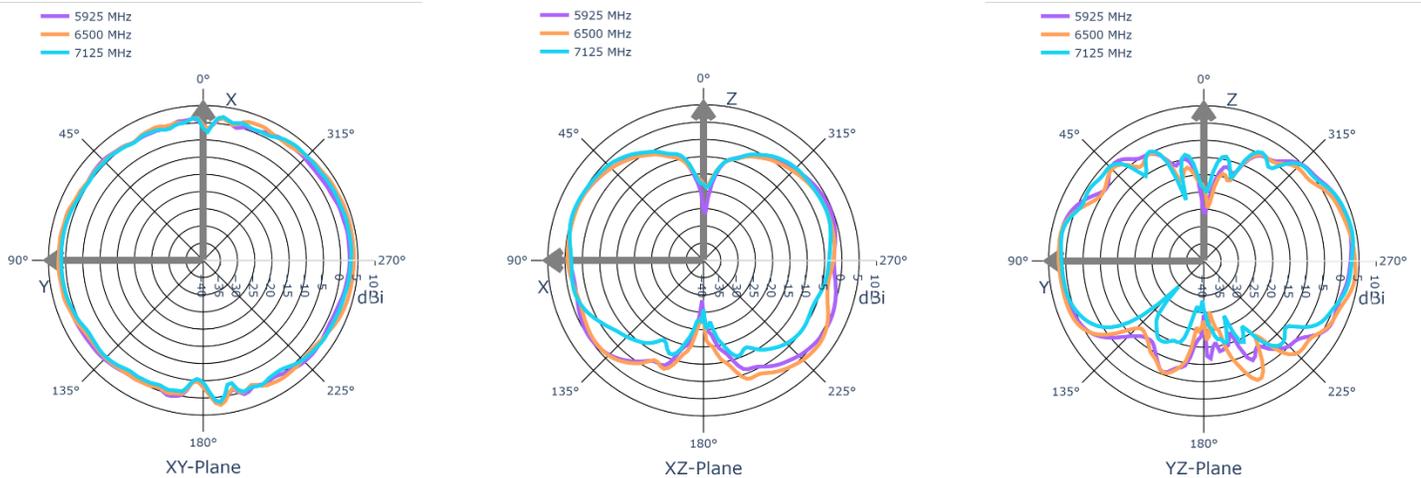


Figure 5: Model AET245872RPSM-W Measured Radiation Patterns at 6G



## 5. Dimensions

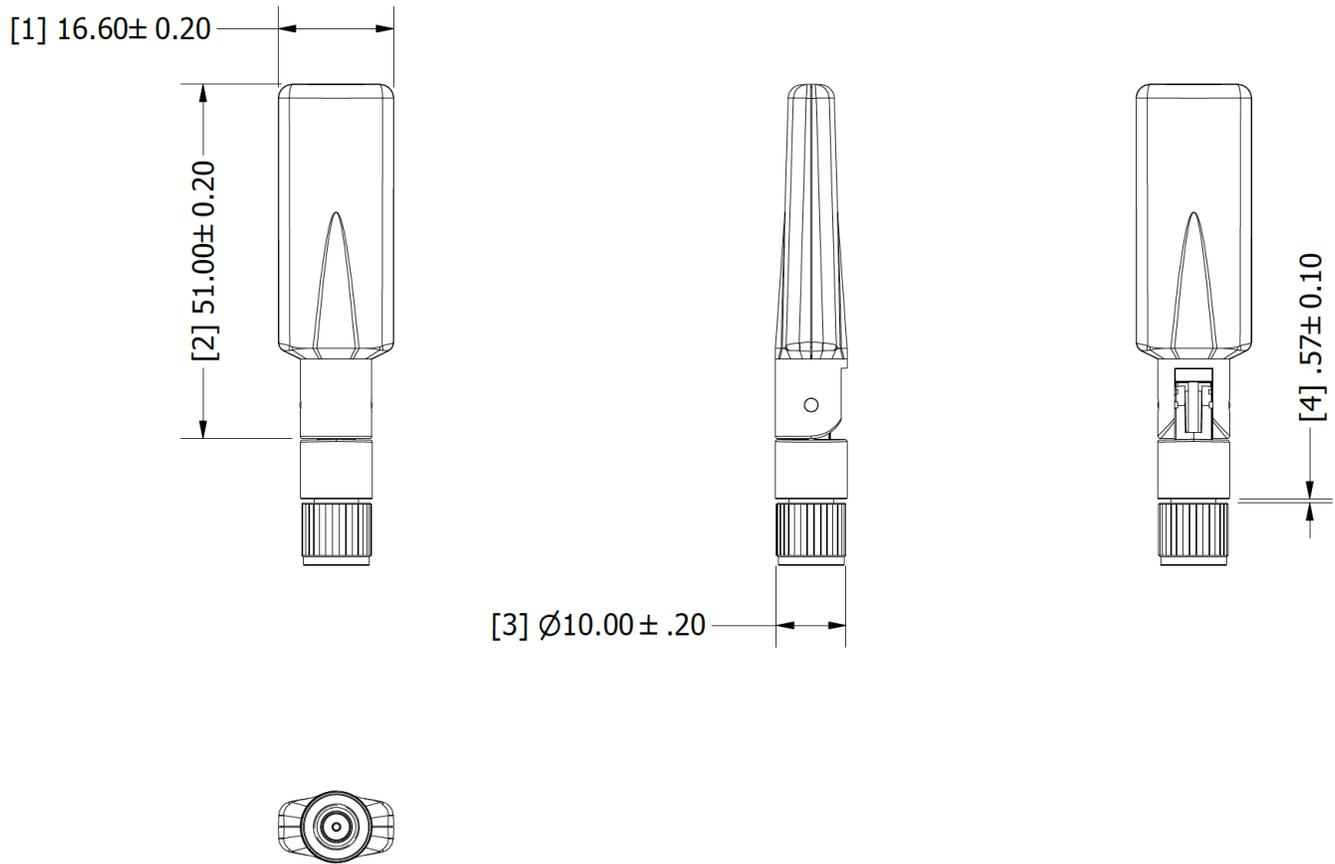


Figure 6: Model AET245872RPSM-W Antenna Dimensions

## 6. ROHS

AOT AET245872RPSM-W External antennas are RoHS compliant.



# 7. Assembly Drawing

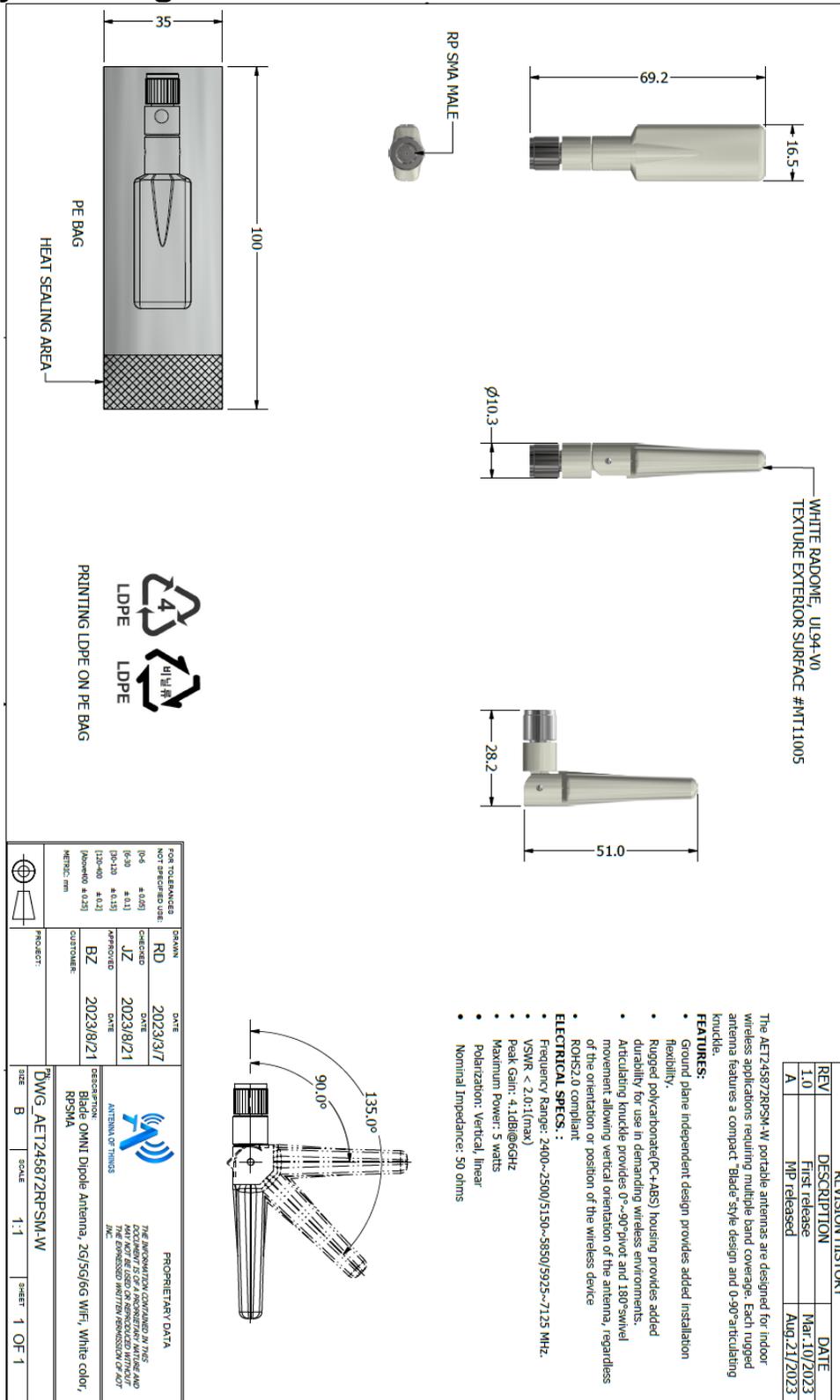


Figure 7: Model AET245872RPSM-W Antenna Assembly Drawing