

WI-FI PANEL

IO

5 GHz Dual Polarization Panel Antenna

SZW-N-3W19

FREQUENCY
5150 to 5850 MHz

PEAK GAIN
12.0 dBi

POLARIZATION
H / V, 2 port

SIZE
207 × 178 × 46 mm

5 GHz

5150 to 5850 MHz

Covers Wi-Fi, IEEE 802.11a, WiMAX, 5.4 GHz European band

Key Features

- High gain: 12 dBi
- ABS radome
- Dimensions: 207 × 178 × 46 mm
- Dual polarity feed
- MIMO, multiple input and multiple output
- 2 × SMA female connectors

1 Introduction

Introducing the Synzen IO, a high-performance panel antenna meticulously crafted for exceptional functionality, tailored for demanding environments, and boasting an elegant, low-profile design. The IO antenna delivers an impressive peak gain of 12 dBi, all within a remarkably compact 207 × 178 mm frame that is ruggedized to endure any environmental challenge.

Operating seamlessly across the 5150 to 5850 MHz spectrum, the IO is the perfect solution for point-to-point applications where form factor is of utmost importance. With a horizontal and vertical beamwidth of 60 degrees, this Synzen IO antenna ensures precise signal coverage.

Equipped with 2 SMA female connectors, this 2-port panel antenna comes encased in a UV-resistant ABS radome, guaranteeing reliable, all-weather performance. Plus, its convenient mounting points facilitate swift installation, making it a versatile choice for your connectivity needs.

— Features

- ◆ High gain: 12 dBi
- ◆ ABS radome
- ◆ Dimensions: 207 × 178 × 46 mm
- ◆ Dual polarity feed
- ◆ MIMO, multiple input and multiple output
- ◆ 2 × SMA female connectors

— Applications

- ◆ Wi-Fi Systems
- ◆ WiMAX Technology
- ◆ 5.8 GHz Wireless Systems
- ◆ IEEE 802.11a Wireless LAN
- ◆ Unlicensed European 5.4 GHz Band

2 Mechanical Specifications

Part Number	SZW-N-3W19
Name	IO
Dimensions (mm)	207.0 × 178.0 × 46.0
Antenna Type	Panel
Material	ABS

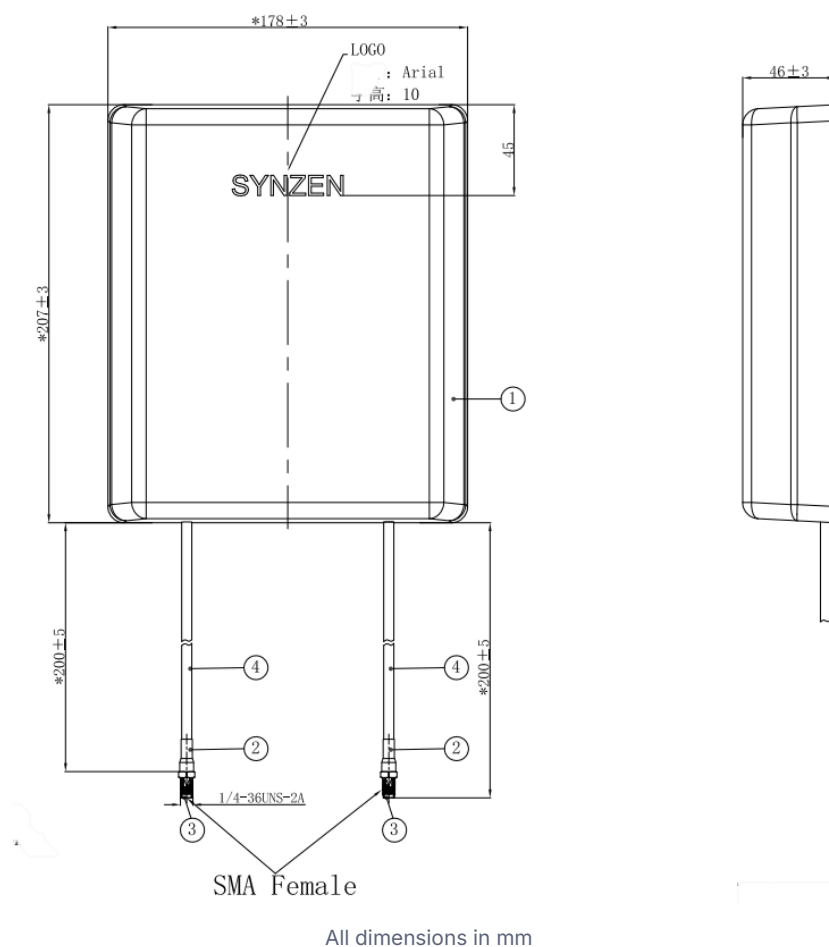
3 Electrical / RF Specifications

Band	Frequency Range (MHz)	VSWR	Peak Gain (dBi)	Front to Back Ratio (dB)	Impedance	Polarization
Wi-Fi	5150 to 5850	<2.0:1	12.0	23	50 Ω	H / V

4 Environmental

Operational Temperature	-40 to +60°C
Storage Temperature	-10 to +40°C
Relative Humidity	5 to 95%
Moisture Sensitivity Level (MSL)	NA
RoHS and REACH compliant	Yes

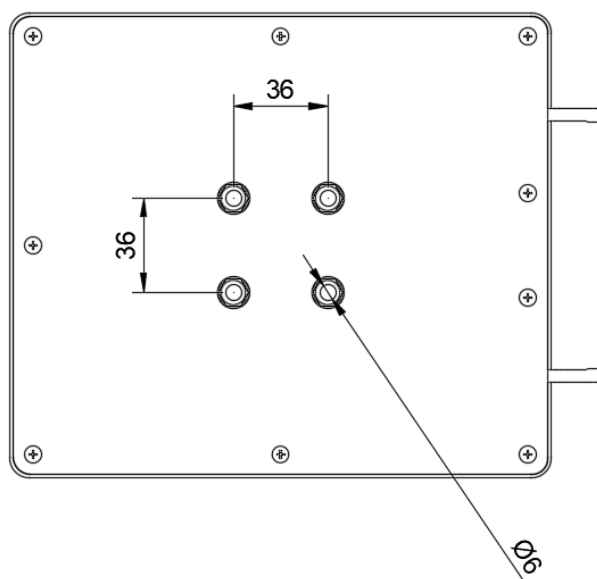
5 Antenna Mechanical Drawing



6 Materials

No.	Part	Description	Qty
1	Antenna Cover	Plastic; Color: White	1
2	Tube	Heat Shrink Tube	2
3	Connector	SMA Female, Gold Plated	2
4	Cable	SSF-50-3-1.5 White Cable	2

7 Mounting Holes



All dimensions in mm

8 Pole Mounting



9 Compliance

ROHS

Compliant

Conforms to EU RoHS Directive 2011/65/EU as amended by Delegated Directive (EU) 2015/863.

REACH

Compliant

Conforms to EU REACH Regulation (EC) No 1907/2006.

CERTIFICATE

On request

A certificate of conformance is available upon request from sales@synzen.com.tw.

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