

ECN/PCN No.: R0362

For Manufacturer

Product Description: 2.4GHz: Wi-Fi/BT External Antenna	Abracon Part Number / Part Series: PRO-EX-348	<input type="checkbox"/> Documentation only	<input type="checkbox"/> Series
		<input checked="" type="checkbox"/> ECN	<input type="checkbox"/> Part Number
		<input type="checkbox"/> EOL	
Affected Revision: B	New Revision: C	Application:	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety
Prior to Change:			
After Change: Added Ingress Protection rating : IP65			
Cause/Reason for Change: Added Ingress Protection rating : IP65 Improved the Presentation of the Product			

Change Plan

Effective Date: 06/03/2025	Additional Remarks:		
Change Declaration:			
Issued Date: 06/03/2025	Issued By: Urmila Madhipatla	Issued Department: Engineering	
Approval: Saravanan Subramanian Engineering Manager	Approval: Reuben Quintanilla Quality Director	Approval: Ying Huang Purchasing Director	

For Abracon EOL only

Last Time Buy (if applicable):	Alternate Part Number / Part Series:		
Additional Approval:	Additional Approval:	Additional Approval:	

Customer Approval (If Applicable)

Qualification Status: <input type="checkbox"/> Approved <input type="checkbox"/> Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>		
Customer Part Number:	Customer Project:	
Company Name:	Company Representative:	Representative Signature:
Customer Remarks:		

2.4GHz: Wi-Fi/BT External Antenna



PRO-EX-348

Request Samples



Check Inventory



Ø 12 x 28 mm

RoHS/RoHS II Compliant

MSL Level = 1

Features

- Ultra-Compact
- High Reliability/ Sensitivity
- Easy to install
- ROHS Compliant
- Waterproof IP65 Rated

Applications

- Wi-Fi/Bluetooth/ZigBee/ISM
- IoT/M2M
- Network Devices
- Set top Boxes

Product Image



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Electrical Specification – Antenna

Parameter	Specification	Unit
Operating Frequency	2400 - 2500	MHz
Return Loss	< -11.6	dB
Polarization	Linear	-
Total Efficiency	>-0.9	dB
Peak Gain	3.3	dBi
Impedance	50	Ω

Note: Performance will vary depending on the ground plane, application, and environment.

Mechanical Specification

Parameter	Specification
Antenna Dimension	Ø 12 x 28 mm
Mounting Type	Screw
Material(s)	Nylon
Connector Type	RP-SMA (M)

Environmental Specification

Parameter	Specification
Storage Temperature	-30° C to +70° C
Ingress Protection	IP65

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Ordering Information

Part Number	Description
PRO-EX-348	2.4GHz: Wi-Fi/BT External Antenna without UV Protection
PRO-EX-348-1	2.4GHz: Wi-Fi/BT External Antenna with UV Protection

2.4GHz: Wi-Fi/BT External Antenna



PRO-EX-348

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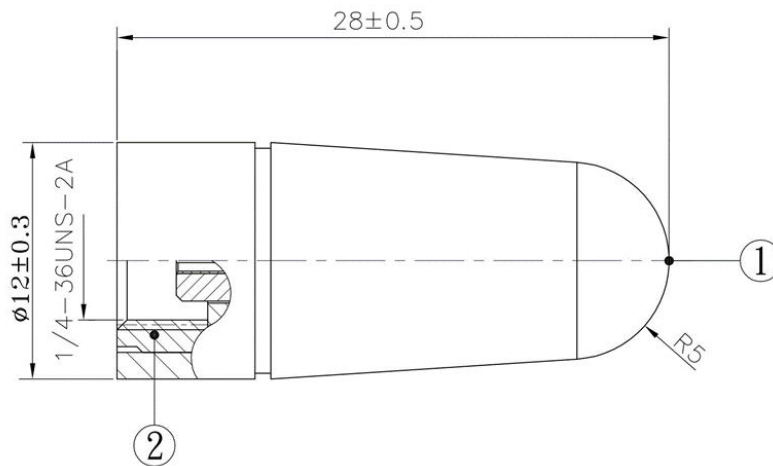


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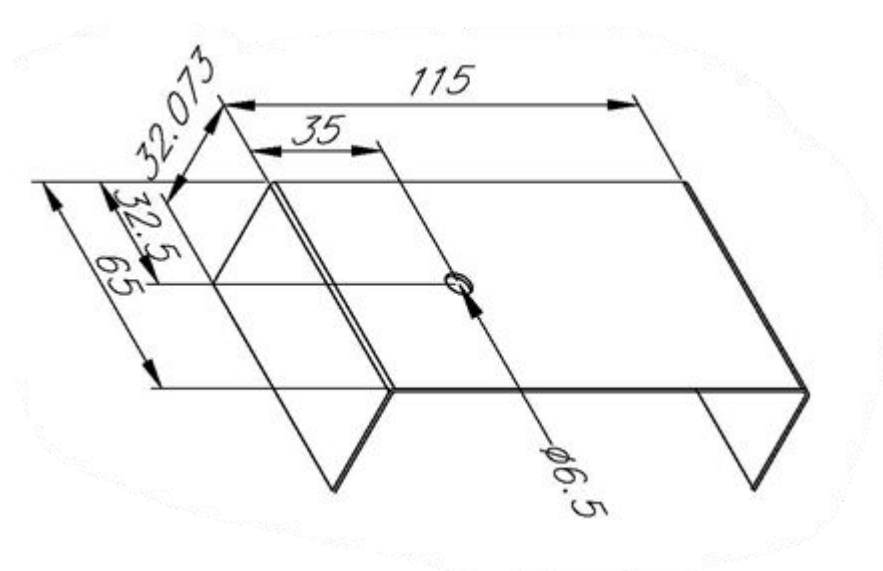
Product Dimensions



Unit: mm

Measurement Setup

The antenna measurements were all done in free space, assembled on an aluminum sheet metal test fixture according to the sketch below.



Unit: mm



5101 Hidden Creek Ln Spicewood TX 78669
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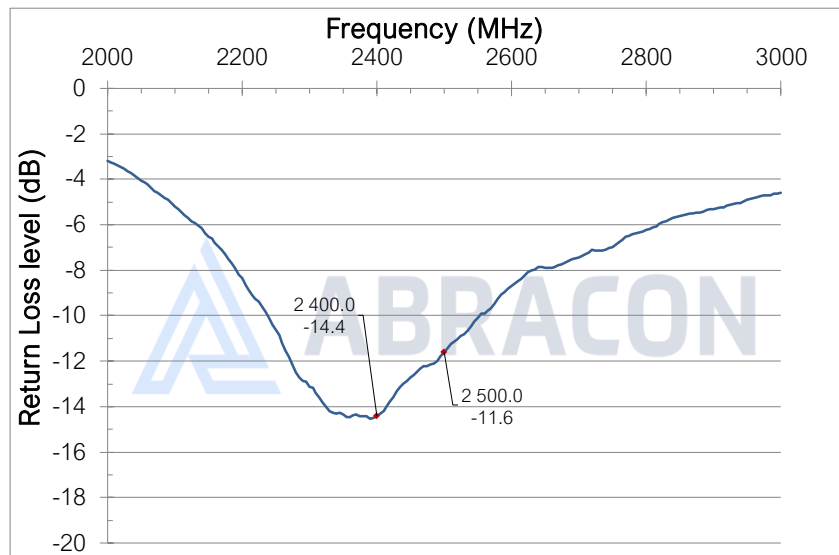


Ø 12 x 28 mm

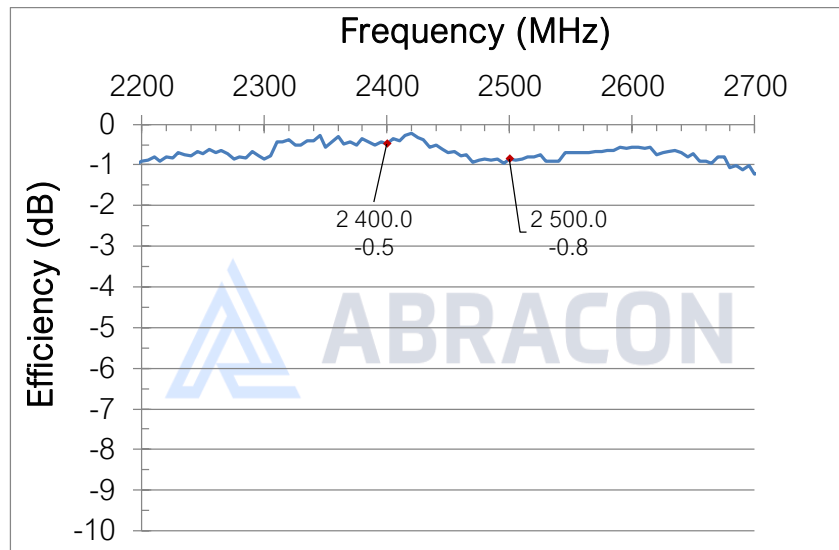
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Reflection Characteristics – Return Loss



Radiation Characteristics – Total Efficiency (dB)



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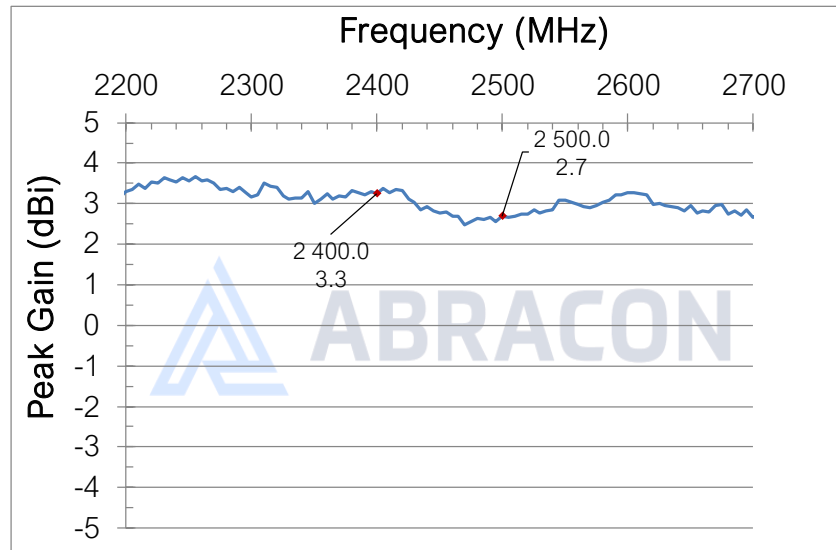


Ø 12 x 28 mm

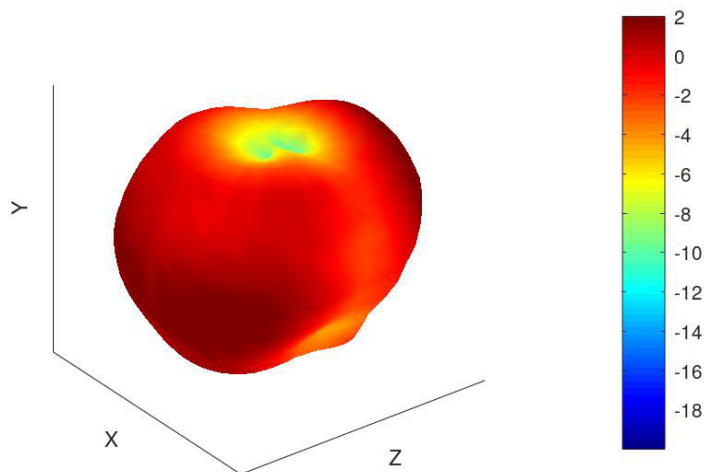
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Radiation Characteristics – Maximum Gain



Radiation Characteristics – 3D Pattern @ 2450 MHz



Unit: dBi



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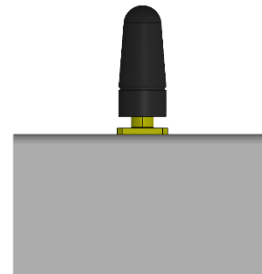
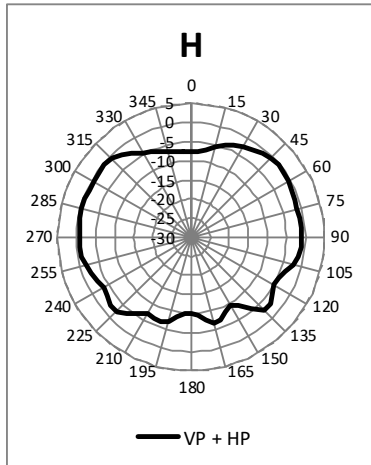
Ø 12 x 28 mm

RoHS/RoHS II Compliant

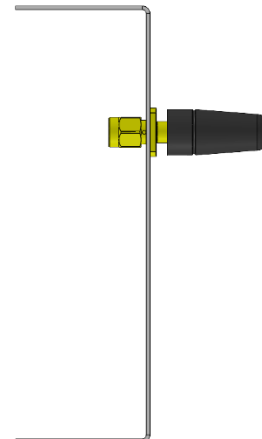
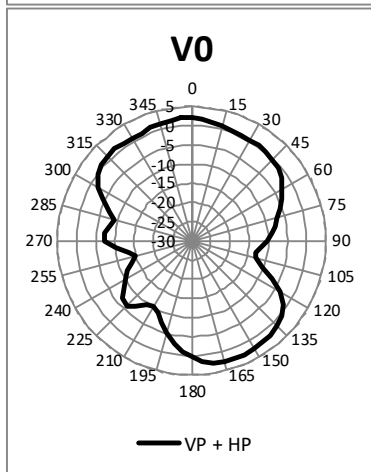
MSL Level = 1

Radiation Characteristics – 2D Pattern @ 2450 MHz

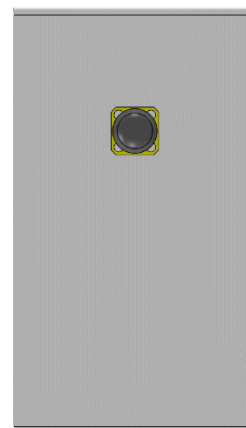
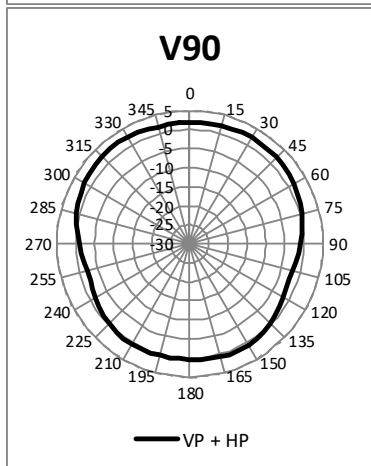
XY-plane:



YZ-plane:



XZ-plane:



VP: Vertical Polarization
HP: Horizontal Polarization

Unit: dBi



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Packaging

The antenna is delivered in a plastic bag.

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



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Brand	Affected PN	Discontinued/EOL PN	Added PN
Abracon	PRO-EX-348		

Series	ECO#
PRO-EX-348	R0362

Datasheet Link

<https://abracon.com/datasheets/PRO-EX-348.pdf>

ECN Notification Link

https://abracon.com/downloads/ECN-PCN/ECN-PCN-Notification_ECOR0362_PRO-EX-348.pdf