



DR-AP4029(OUTDOOR)

Access Point Wireless Module

Dual band 11AC Wave2 Module

Description

DR-AP4029(Outdoor) is a 2x2 2.4G&5G high power Radio AP Router which including 1xDR40X9(IPQ4019/IPQ4029) Board;1 x Onmi Antenna; 1 x POE Adapter(24V¹A~48V^{0.6}A);1 x Enclosure.

Planar Antenna

- 2 x 5G Antenna
- 5G: 16dbi

DRA25 Antenna(Optional)

Electrical Properties :

Frequency Range: 2.4~2.5&5.15~5.85GHz

Impedance: 50Ω

VSWR: 2.0 Max (≤2.0)

Gain(peak): 6±0.5dBi

Polarization: Linear; Vertical

Physical Properties :

Cable: RG-141 Cable

Connector: N-type PLUG

Antenna CAP: ABS

OperatingTemp: -40°C~+65°C

Storage Temp: -40°C~+75°C

CableTemp: <+250°C



Enclosure

- Dimension: 275x140x48mm
- UV Protected and Durable ABS Radome
- IP67 Waterproof Level
- Support Wallys' PCBA Mainboard



Absolute Maximum Rating

Parameter	Rating	Unit
Supply Voltage	24V~48	V
Operating Temperature Range	-40 to +70	°C
Storage Temperature Range	-45 to +105	°C
Operating Humidity Range	5 to +95 (non-condensing)	%
Storage Humidity Range	0 to +90 (non-condensing)	%

Hardware Specifications

Symbol	Parameter
CPU	IPQ4029/IPQ4019
Antenna Connector	2 x 5G MMCX connectors;2x2.4G MMCX
10/100/1000Mbps Gigabit Ethernet	2xRJ45
SFP connector	1xSFP fiber module connector (optional)
3G/4G connector	1xmini PCIe 3G/4G connector support with two sim card
USB connector	1xUSB 3.0 connector
POE	24V~48V passive POE
DC Jack	24V~48V power supply
ROHS Compliance	YES
Dimension	115mm x 105mm x 16mm
Max Power	48.1V x 0.180A= 8.658W
Nor Flash	2MB~32MB
Nand Flash	128MB
DDR	256MB~512MB

Radio TX Specifications(5180MHz-5825MHz)

Operating Mode	Data Rate	Power		Tolerance
		1 Chain	2 Chains	
802.11a	6 Mbps	27dBm	30dbm	±2dB
	54 Mbps	23dBm	26dbm	±2dB
802.11n HT20	MCS0, MCS8	26dBm	29dbm	±2dB
	MCS7, MCS15	22dBm	25dbm	±2dB
802.11n HT40	MCS0, MCS8	25dBm	28dbm	±2dB
	MCS7, MCS15	21dBm	24dbm	±2dB
802.11ac	MCS0, MCS10, MCS20	25dBm	28dbm	±2dB
	MCS9, MCS19, MCS29	19dBm	22dbm	±2dB

Radio RX Specifications(5180MHz-5825MHz)

Operating Mode	Data Rate	Sensitivity
802.11a	6 Mbps	-96dBm
	54 Mbps	-78dBm
802.11n HT20	MCS0, MCS8	-93dBm
	MCS7, MCS15	-73dBm
802.11n HT40	MCS0, MCS8	-90dBm
	MCS7, MCS15	-70dBm
802.11AC HT40	MCS0, MCS10, MCS20	-90dBm
	MCS9, MCS19, MCS29	-67dBm
802.11AC HT80	MCS0, MCS10, MCS20	-88dBm
	MCS9, MCS19, MCS29	-62dBm

Radio TX Specifications(2412MHz-2482MHz)

Operating Mode	Data Rate	Power		Tolerance
		1 Chain	2 Chains	
802.11g	6 Mbps	27dbm	30dbm	±2dB
	54 Mbps	25dbm	28dbm	±2dB
802.11n HT20	MCS0, MCS8	26dbm	29dbm	±2dB
	MCS7, MCS15	25dbm	28dbm	±2dB
802.11n HT40	MCS0, MCS8	26dbm	29dbm	±2dB
	MCS7, MCS15	24dbm	27dbm	±2dB

Radio RX Specifications(2412MHz-2482MHz)

Operating Mode	Data Rate	Sensitivity
802.11g	6 Mbps	-96dBm
	54 Mbps	-78dBm
802.11n HT20	MCS0, MCS8	-93dBm
	MCS7, MCS15	-73dBm
802.11n HT40	MCS0, MCS8	-90dBm
	MCS7, MCS15	-70dBm

Version

Item	Information
DR40X9-1	CPU is IPQ4019
DR40X9-2	CPU is IPQ4029

LED & GPIO header

Item	Information	Note
1	PWR LED	
2	Eth1 LED	
3	Eth2 LED	
4	2.4G LED	GPIO32
5	5G LED	GPIO50
6	Strength LED	GPIO36
7	Strength LED	GPIO39
8	NC	
9	GND	
10	Uart1_TX	GPIO8
11	Uart1_RX	GPIO9
12	NC	
13	NC	
14	NC	
15	GND	
16	PWR	

Serial Port

Item	Information	Note
1	PWR	
2	Uart0 TX	
3	Uart0 RX	
4	GND	

GPIO

Item	Information	Note
GPIO11	Control for the switch of SIM cards	