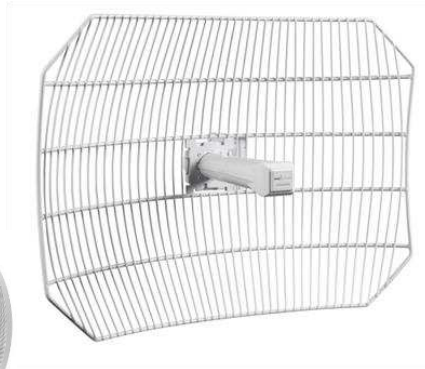


MagiNode™ and MagiPoint™ Specification Sheets



MN-WW60-G-AD
Building block of 1 Gbps
Data Pipeline. Used for
distances of 700m in
conjunction with
MagiLink™ Routers to
provide backbone to
MaaNet™.



MND5-G27: 5GHz Data
Pipeline MagiNode™
with a 27 dBi Grid
Antenna. It is used for
the 3-4 km hops.



MND5-M: 5GHz Data
Pipeline MagiNode™
with a built in 13 dBi
Antenna. It is used for
2-3 km hops. It uses
MIMO for very high data
rates.

MP052-4-4 The
MagiPoint™ provides a
self-backhauling solution
to provide WiFi access to
smartphones, tablets and
laptops. One antenna
connects to MagiNet™
and the other provides
WiFi Access.



MN05-4 The Omni
MagiNode™ is used as an
end-device on homes
and businesses to
provide Internet access,
or as a relay to bridge
difficult areas. It meshes
seamlessly with
MagiNet™ .

MN-WW60-G-AD 60GHz, 1 Gbps Point-to-Point Pair:

Details	
Product code	RBLHGG-60adkit
Architecture	ARM 32bit
CPU	IPQ-4019
CPU core count	4
CPU nominal frequency	716.8 MHz
Dimensions	Ø 391 x 222 mm
Weight	1003 gram
License level	3
Operating System	RouterOS
Size of RAM	256 MB
Storage size	16 MB
Storage type	FLASH
Tested ambient temperature	-40°C to 55°C

POWERING

Details	
PoE in	802.3af/at
PoE in input Voltage	12-57 V
Number of DC inputs	1 (PoE-IN)
Max power consumption	5 W

ETHERNET

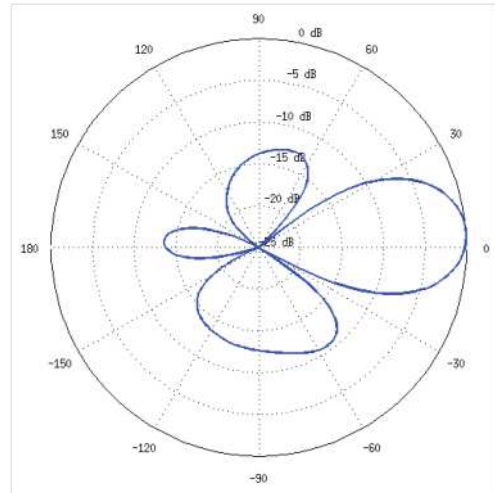
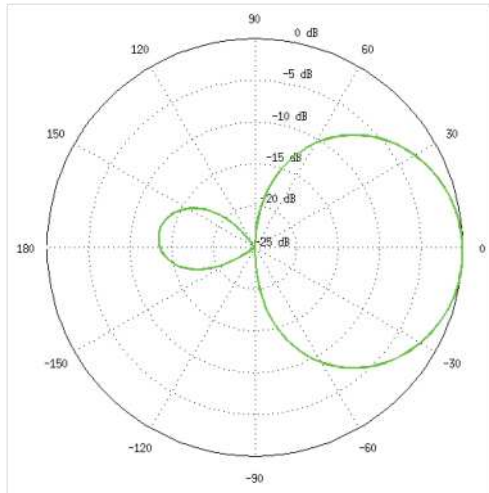
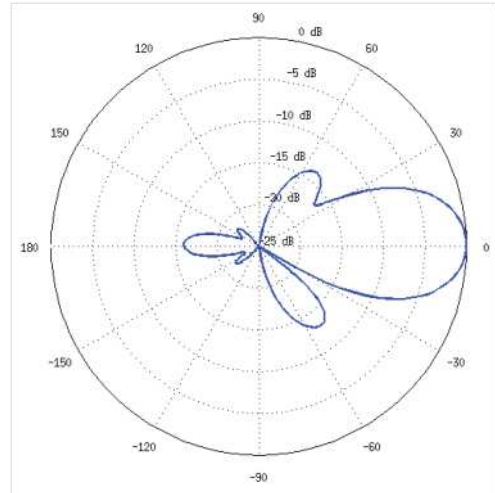
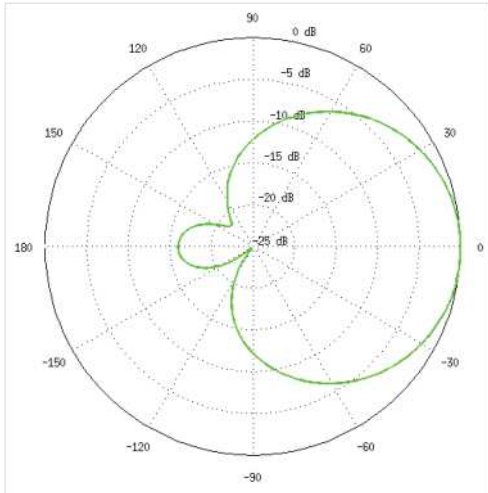
Details	
10/100/1000 Ethernet ports	1



MND5-M Data Pipeline MagiNode™ 5GHz M

MND5-M			
Dimensions	294 x 31 x 80 mm (11.57 x 1.22 x 3.15")		
Weight	400 g (14.11 oz)		
Power Supply (PoE)	24V, 0.5A		
Max. Power Consumption	8W		
Power Method	Passive PoE (Pairs 4, 5+; 7, 8 Return)		
Operating Frequency	Worldwide	USA	USA DFS
	5170-5875 MHz	5725-5850 MHz	5250-5850 MHz
Gain	14.6-16.1 dBi		
Networking Interface (2)	10/100 Ethernet Ports		
Processor Specs	Atheros MIPS 74Kc, 560 MHz		
Memory	64 MB DDR2, 8 MB Flash		
Frequency	5 GHz		
Cross-pol Isolation	22 dB Minimum		
Max. VSWR	1.6:1		
Beamwidth	43° (H-pol) / 41° (V-pol) / 15° (Elevation)		
Polarization	Dual Linear		
Enclosure	Outdoor UV Stabilized Plastic		
Mounting	Pole-Mount (Kit Included)		
Operating Temperature	-30 to 75° C (-22 to 167° F)		
Operating Humidity	5 to 95% Noncondensing		
Wireless Approvals	FCC Part 15.247, IC RS210, CE		
RoHS Compliance	Yes		
Shock & Vibration	ETSI300-019-1.4		

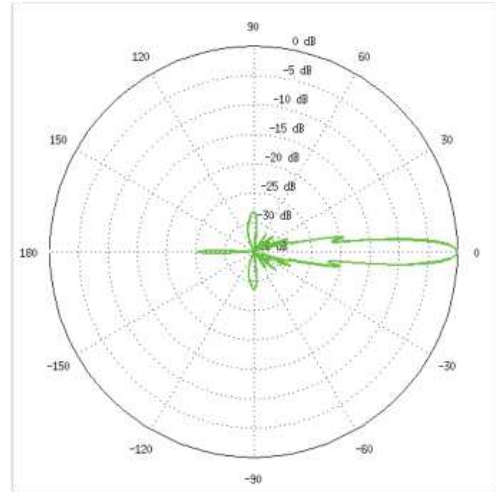
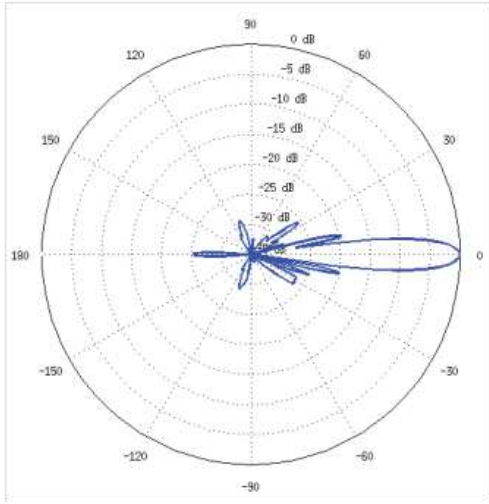
5 GHz TX Power Specifications			5 GHz RX Power Specifications		
MCS	Avg. TX	Tolerance	MCS	Sensitivity	Tolerance
MCS0	27 dBm	± 2 dB	MCS0	-96 dBm	± 2 dB
MCS1	27 dBm	± 2 dB	MCS1	-95 dBm	± 2 dB
MCS2	27 dBm	± 2 dB	MCS2	-92 dBm	± 2 dB
MCS3	27 dBm	± 2 dB	MCS3	-90 dBm	± 2 dB
MCS4	26 dBm	± 2 dB	MCS4	-86 dBm	± 2 dB
MCS5	24 dBm	± 2 dB	MCS5	-83 dBm	± 2 dB
MCS6	22 dBm	± 2 dB	MCS6	-77 dBm	± 2 dB
MCS7	21 dBm	± 2 dB	MCS7	-74 dBm	± 2 dB
MCS8	27 dBm	± 2 dB	MCS8	-95 dBm	± 2 dB
MCS9	27 dBm	± 2 dB	MCS9	-93 dBm	± 2 dB
MCS10	27 dBm	± 2 dB	MCS10	-90 dBm	± 2 dB
MCS11	27 dBm	± 2 dB	MCS11	-87 dBm	± 2 dB
MCS12	26 dBm	± 2 dB	MCS12	-84 dBm	± 2 dB
MCS13	24 dBm	± 2 dB	MCS13	-79 dBm	± 2 dB
MCS14	22 dBm	± 2 dB	MCS14	-78 dBm	± 2 dB
MCS15	21 dBm	± 2 dB	MCS15	-75 dBm	± 2 dB



MND5-G27 Data Pipeline MagiNode™ 5GHz, 27dBi Grid

MND5-G27	
Processor Specs	Atheros MIPS 74Kc, 560 MHz
Memory Information	64 MB DDR2, 8 MB Flash
Networking Interface	(1) 10/100 Ethernet Port
Wireless Approvals	FCC Part 15.247, IC RS210, CE
RoHS Compliance	Yes
Enclosure Characteristics	Outdoor UV Stabilized Plastic
Mounting Kit	Pole Mounting Kit (Included)
Max. Power Consumption	3W
Power Supply	24V, 0.5A PoE Adapter (Included)
Power Method	Passive Power over Ethernet (Pairs 4, 5+; 7, 8 Return)
Operating Temperature	-30 to 75° C (-22 to 167° F)
Operating Humidity	5 to 95% Condensing
Shock and Vibration	ETSI300-019-1.4
ETSI Specification	EN 302 326 DN2
Dimensions (Mount Included)	620 x 460 x 360 mm (24.41 x 18.11 x 14.17")
Weight (Mount Included)	2585 g (5.699 lb)
Wind Survivability	200 km/h (125 mph)
Wind Loading	34.7 N @ 200 km/h (7.8 lbf @ 125 mph)
Operating Frequency	Worldwide: 5170 – 5875 MHz USA: 5725 – 5850 MHz
Max. VSWR	1.5:1
Gain	27 dBi

5 GHz TX Power Specifications			5 GHz RX Power Specifications		
MCS	Avg. TX	Tolerance	MCS	Sensitivity	Tolerance
MCS0	25 dBm	± 2 dB	MCS0	-97 dBm	± 2 dB
MCS1	25 dBm	± 2 dB	MCS1	-96 dBm	± 2 dB
MCS2	25 dBm	± 2 dB	MCS2	-93 dBm	± 2 dB
MCS3	24 dBm	± 2 dB	MCS3	-91 dBm	± 2 dB
MCS4	23 dBm	± 2 dB	MCS4	-87 dBm	± 2 dB
MCS5	22 dBm	± 2 dB	MCS5	-84 dBm	± 2 dB
MCS6	21 dBm	± 2 dB	MCS6	-78 dBm	± 2 dB
MCS7	19 dBm	± 2 dB	MCS7	-75 dBm	± 2 dB



MN05-4 Omni MagiNode™ 5 GHz, 4 dBi Omni Antenna

MN05-4

Processor Specs	Atheros MIPS 24KC, 400MHz
Memory Information	32MB SDRAM, 8MB Flash
Networking Interface	1 X 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet
Wireless Approvals	FCC Part 15.247, IC RS210, CE
RoHS Compliance	YES
Size	49 x Ø4.2 cm (length, diameter)
Weight	0.44kg
Enclosure Characteristics	Waterproof Aluminum Cylinder
Antenna	4 dBi Omni
Max Power Consumption	7 Watts
Power Rating	Up to 24V
Power Method	Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)*
Operating Temperature	-40C to 80C
Operating Humidity	5 to 95% Condensing
Shock and Vibration	ETSI300-019-1.4

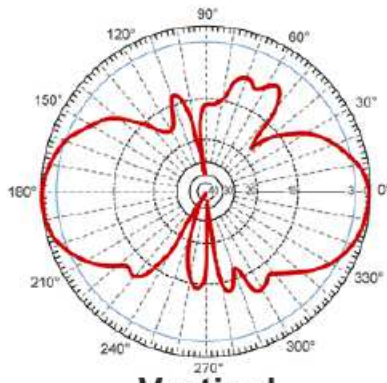
Operating Frequency 5170-5825 MHz*

OUTPUT POWER: 25 dBm

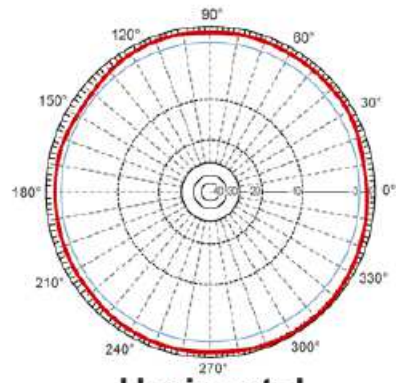
5 GHz TX POWER SPECIFICATIONS

5 GHz RX POWER SPECIFICATIONS

Data Rate	Avg. TX	Tolerance	Data Rate	Sensitivity	Tolerance
MCS0	25 dBm	+/- 2 dB	MCS0	-96 dBm	+/- 2 dB
MCS1	25 dBm	+/- 2 dB	MCS1	-95 dBm	+/- 2 dB
MCS2	25 dBm	+/- 2 dB	MCS2	-92 dBm	+/- 2 dB
MCS3	25 dBm	+/- 2 dB	MCS3	-90 dBm	+/- 2 dB
MCS4	24 dBm	+/- 2 dB	MCS4	-86 dBm	+/- 2 dB
MCS5	22 dBm	+/- 2 dB	MCS5	-83 dBm	+/- 2 dB
MCS6	20 dBm	+/- 2 dB	MCS6	-77 dBm	+/- 2 dB
MCS7	19 dBm	+/- 2 dB	MCS7	-74 dBm	+/- 2 dB



Vertical



Horizontal



MPO52-4-4 Omni MagiPoint™ 5 GHz, 4 dBi, 2.4 GHz 4 dBi
 Integrated Omni 5GHz MagiNode™ with 2.4 GHz Wi-Fi Access Point

MPO52-4-4

Processor Specs	Atheros MIPS 24KC, 400MHz
Memory Information	32MB SDRAM, 8MB Flash
Networking Interface	1 X 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet
Wireless Approvals	FCC Part 15.247, IC RS210, CE
RoHS Compliance	YES
Size	79 x Ø4.2 cm (length, diameter)
Weight	0.75kg
Enclosure Characteristics	Waterproof Aluminum Cylinder
Antenna	5GHz, 4 dBi Omni, 2.4 GHz, 4 dBi Omni
Max Power Consumption	13 Watts
Power Rating	Up to 24V
Power Method	DC Power Supply 12 – 24 V
Operating Temperature	-40C to 80C
Operating Humidity	5 to 95% Condensing
Shock and Vibration	ETSI300-019-1.4

Operating Frequency 5170-5825 MHz

OUTPUT POWER: 25 dBm

5 GHz TX POWER SPECIFICATIONS

5 GHz RX POWER SPECIFICATIONS

Data Rate	Avg. TX	Tolerance	Data Rate	Sensitivity	Tolerance
MCS0	25 dBm	+/- 2 dB	MCS0	-96 dBm	+/- 2 dB
MCS1	25 dBm	+/- 2 dB	MCS1	-95 dBm	+/- 2 dB
MCS2	25 dBm	+/- 2 dB	MCS2	-92 dBm	+/- 2 dB
MCS3	25 dBm	+/- 2 dB	MCS3	-90 dBm	+/- 2 dB
MCS4	24 dBm	+/- 2 dB	MCS4	-86 dBm	+/- 2 dB
MCS5	22 dBm	+/- 2 dB	MCS5	-83 dBm	+/- 2 dB
MCS6	20 dBm	+/- 2 dB	MCS6	-77 dBm	+/- 2 dB
MCS7	19 dBm	+/- 2 dB	MCS7	-74 dBm	+/- 2 dB

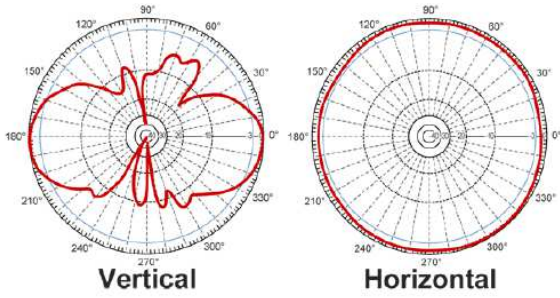
Operating Frequency 2412-2462 MHz

OUTPUT POWER: 28 dBm

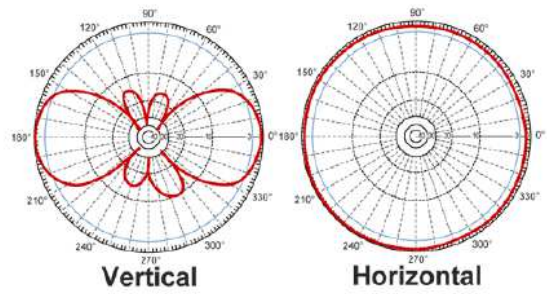
2.4 GHz TX POWER SPECIFICATIONS

2.4 GHz RX POWER SPECIFICATIONS

Data Rate	Avg. TX	Tolerance	Data Rate	Sensitivity	Tolerance
6-24 Mbps	28 dBm	+/- 2 dB	24 Mbps	-83 dBm	+/- 2 dB
36 Mbps	25 dBm	+/- 2 dB	36 Mbps	-80 dBm	+/- 2 dB
48 Mbps	24 dBm	+/- 2 dB	48 Mbps	-77 dBm	+/- 2 dB
54 Mbps	23 dBm	+/- 2 dB	54 Mbps	-75 dBm	+/- 2 dB
MCS0	28 dBm	+/- 2 dB	MCS0	-96 dBm	+/- 2 dB
MCS1	28 dBm	+/- 2 dB	MCS1	-95 dBm	+/- 2 dB
MCS2	28 dBm	+/- 2 dB	MCS2	-92 dBm	+/- 2 dB
MCS3	28 dBm	+/- 2 dB	MCS3	-90 dBm	+/- 2 dB
MCS4	27 dBm	+/- 2 dB	MCS4	-86 dBm	+/- 2 dB
MCS5	25 dBm	+/- 2 dB	MCS5	-83 dBm	+/- 2 dB
MCS6	23 dBm	+/- 2 dB	MCS6	-77 dBm	+/- 2 dB
MCS7	22 dBm	+/- 2 dB	MCS7	-74 dBm	+/- 2 dB



5GHz Omni Antenna



2.4 GHz Antenna



MN-W2-04 Outdoor Wi-Fi AP, 2.4 GHz 4 dBi Omni Antenna

MN-W2-04

Processor Specs	Atheros MIPS 24KC, 400MHz
Memory Information	32MB SDRAM, 8MB Flash
Networking Interface	1 X 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet
Wireless Approvals	FCC Part 15.247, IC RS210, CE
RoHS Compliance	YES
Size	51 x Ø4.2 cm (length, diameter)
Weight	0.8kg
Enclosure Characteristics	Waterproof Aluminum Cylinder
Antenna	4 dBi Omni
Max Power Consumption	7 Watts
Power Rating	Up to 24V
Power Method	Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)*
Operating Temperature	-40C to 80C
Operating Humidity	5 to 95% Condensing
Shock and Vibration	ETSI300-019-1.4

Operating Frequency 2412-2462 MHz
OUTPUT POWER: 28 dBm

2.4 GHz TX POWER SPECIFICATIONS

2.4 GHz RX POWER SPECIFICATIONS

Data Rate	Avg. TX	Tolerance	Data Rate	Sensitivity	Tolerance
6-24 Mbps	28 dBm	+/- 2 dB	24 Mbps	-83 dBm	+/- 2 dB
36 Mbps	25 dBm	+/- 2 dB	36 Mbps	-80 dBm	+/- 2 dB
48 Mbps	24 dBm	+/- 2 dB	48 Mbps	-77 dBm	+/- 2 dB
54 Mbps	23 dBm	+/- 2 dB	54 Mbps	-75 dBm	+/- 2 dB
MCS0	28 dBm	+/- 2 dB	MCS0	-96 dBm	+/- 2 dB
MCS1	28 dBm	+/- 2 dB	MCS1	-95 dBm	+/- 2 dB
MCS2	28 dBm	+/- 2 dB	MCS2	-92 dBm	+/- 2 dB
MCS3	28 dBm	+/- 2 dB	MCS3	-90 dBm	+/- 2 dB
MCS4	27 dBm	+/- 2 dB	MCS4	-86 dBm	+/- 2 dB
MCS5	25 dBm	+/- 2 dB	MCS5	-83 dBm	+/- 2 dB
MCS6	23 dBm	+/- 2 dB	MCS6	-77 dBm	+/- 2 dB
MCS7	22 dBm	+/- 2 dB	MCS7	-74 dBm	+/- 2 dB

