

Product Information

HWRD600-TSH Series

MU-MIMO 802.11ac Wave1 Industrial Access Point



Features

- ❖ IEEE 802.11ac/a/b/g/n compliant
- ❖ 2.4GHz and 5GHz dual radios
- ❖ 2.4GHz 28dBm and 5GHz 32dBm aggregate power
- ❖ Data rates of up to 867Mbps in 802.11ac 80MHz channels
- ❖ Distance Adjustment for long range transmission
- ❖ IP30 Metal Enclosure
- ❖ Push-Button Reset
- ❖ Dynamic DNS
- ❖ Ping Watchdog
- ❖ Auto Reboot Service
- ❖ Support AP Mass Management Software via SNMP Protocol

Applications

- 802.11b/g/n AP/802.11ac+802.11a/n AP
- Point to Point / Point to Multi-Point/ Coverage/ CPE
- Design for Hard-to-Wire Industrial Application

Specifications

System Memory	128MB DDR2
NOR Flash	16MB
Antenna	Based on Applications
Interface	2x Gigabit Port (Auto MDI-X)
LED	7 LEDs total, Power, LAN1, LAN2, Signal LED 1,2,3,4
Power over Ethernet	Passive PoE 24-56V or IEEE 802.3af/at PoE on LAN0
DC Power	1x DC Jack Connector
Power Consumption	8.6W(Max)
Certification	RoHS Compliance
Environmental	Temperature: Operating: Operating: -20~70°C, Storage: -40~90°C, Humidity (non-condensing): Operating: 5% to 95%, Storage: Max. 90%
Enclosure Type	IP30
Dimensions	30X140X122mm
Other Features	Surge Suppressor, Watchdog Timer

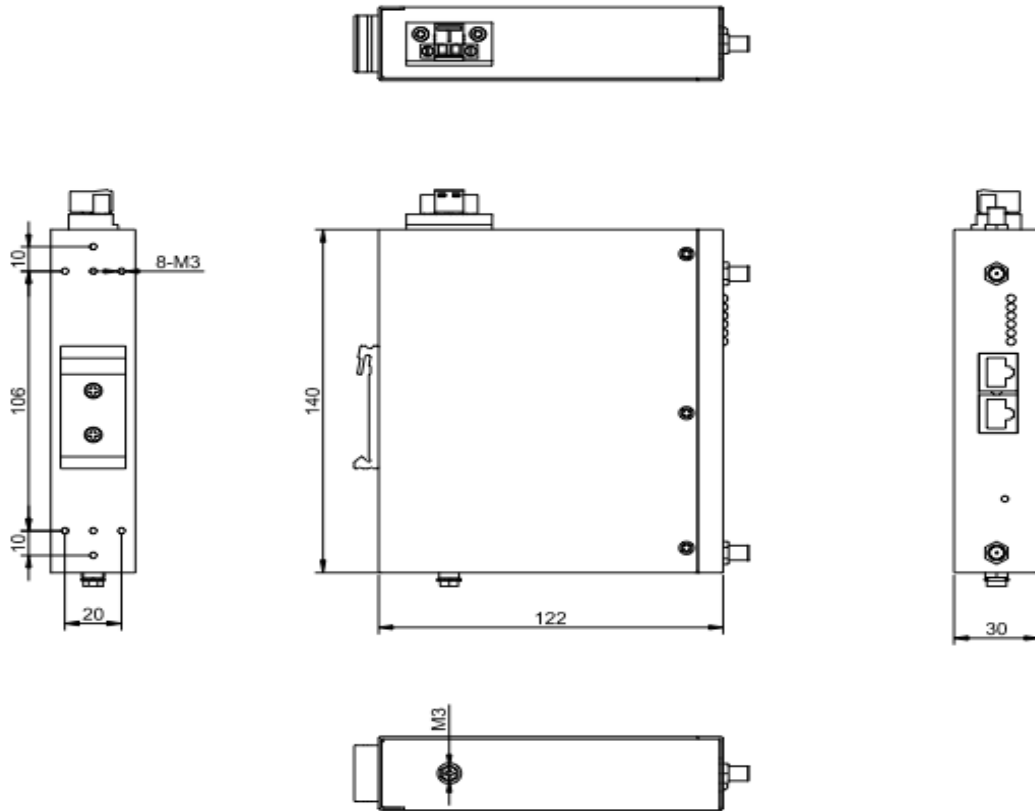
RF Performance Table

	Data Rate	TX Power (per chain)	TX Power (2 chains)	Tolerance		Data Rate	RX Sensitivity	Tolerance
2.4GHz 802.11b	1Mbps	28dBm	33dBm	±2dB	2.4GHz 802.11b	1Mbps		±2dB
	5.5Mbps	28dBm	33dBm	±2dB		5.5Mbps		±2dB
	11Mbps	28dBm	33dBm	±2dB		11Mbps		±2dB
	6Mbps	30dBm	35dBm	±2dB		6Mbps		±2dB
	9Mbps	30dBm	35dBm	±2dB		9Mbps		±2dB
	12Mbps	30dBm	35dBm	±2dB		12Mbps		±2dB
2.4GHz 802.11g	18Mbps	30dBm	35dBm	±2dB	2.4GHz 802.11g	18Mbps		±2dB
	24Mbps	30dBm	35dBm	±2dB		24Mbps		±2dB
	36Mbps	28dBm	33dBm	±2dB		36Mbps		±2dB
	48Mbps	27dBm	32dBm	±2dB		48Mbps		±2dB
	54Mbps	26dBm	31dBm	±2dB		54Mbps		±2dB
	MCS 0	30dBm	35dBm	±2dB		MCS 0		±2dB
2.4GHz 802.11n HT20	MCS 1	28dBm	33dBm	±2dB	2.4GHz 802.11n HT20	MCS 1		±2dB
	MCS 2	28dBm	33dBm	±2dB		MCS 2		±2dB
	MCS 3	28dBm	33dBm	±2dB		MCS 3		±2dB
	MCS 4	27dBm	32dBm	±2dB		MCS 4		±2dB
	MCS 5	26dBm	31dBm	±2dB		MCS 5		±2dB
	MCS 6	25dBm	30dBm	±2dB		MCS 6		±2dB
	MCS 7	24dBm	29dBm	±2dB		MCS 7		±2dB
	MCS 0	29dBm	34dBm	±2dB		MCS 0		±2dB
2.4GHz 802.11n HT40	MCS 1	27dBm	32dBm	±2dB	2.4GHz 802.11n HT40	MCS 1		±2dB
	MCS 2	27dBm	32dBm	±2dB		MCS 2		±2dB
	MCS 3	27dBm	32dBm	±2dB		MCS 3		±2dB
	MCS 4	26dBm	31dBm	±2dB		MCS 4		±2dB
	MCS 5	25dBm	30dBm	±2dB		MCS 5		±2dB
	MCS 6	24dBm	29dBm	±2dB		MCS 6		±2dB
	MCS 7	23dBm	28dBm	±2dB		MCS 7		±2dB

	Data Rate	TX Power (per chain)	TX Power (3 chains)	Tolerance
5GHz 802.11a	6Mbps	27dBm	32dBm	±2dB
	9Mbps	27dBm	32dBm	±2dB
	12Mbps	27dBm	32dBm	±2dB
	18Mbps	27dBm	32dBm	±2dB
	24Mbps	27dBm	32dBm	±2dB
	36Mbps	25dBm	30dBm	±2dB
	48Mbps	24dBm	29dBm	±2dB
	54Mbps	23dBm	28dBm	±2dB
5GHz 802.11n/ac VHT20	MCS 0	26dBm	31dBm	±2dB
	MCS 1	25dBm	30dBm	±2dB
	MCS 2	25dBm	30dBm	±2dB
	MCS 3	24dBm	29dBm	±2dB
	MCS 4	24dBm	29dBm	±2dB
	MCS 5	23dBm	28dBm	±2dB
	MCS 6	22dBm	27dBm	±2dB
	MCS 7	21dBm	26dBm	±2dB
5GHz 802.11n/ac VHT40	MCS 8	20dBm	25dBm	±2dB
	MCS 9	19dBm	24dBm	±2dB
	MCS 0	26dBm	31dBm	±2dB
	MCS 1	25dBm	30dBm	±2dB
	MCS 2	25dBm	30dBm	±2dB
	MCS 3	24dBm	29dBm	±2dB
	MCS 4	24dBm	29dBm	±2dB
	MCS 5	23dBm	28dBm	±2dB
5GHz 802.11ac VHT80	MCS 6	22dBm	27dBm	±2dB
	MCS 7	21dBm	26dBm	±2dB
	MCS 8	20dBm	25dBm	±2dB
	MCS 9	19dBm	24dBm	±2dB

	Data Rate	RX Specifications Sensitivity	Tolerance
5GHz 802.11a	6Mbps	-94dBm	±2dB
	9Mbps	-94dBm	±2dB
	12Mbps	-94dBm	±2dB
	18Mbps	-92dBm	±2dB
	24Mbps	-89dBm	±2dB
	36Mbps	-86dBm	±2dB
	48Mbps	-82dBm	±2dB
	54Mbps	-80dBm	±2dB
5GHz 802.11n/ac VHT20	MCS 0	-94dBm	±2dB
	MCS 1	-94dBm	±2dB
	MCS 2	-92dBm	±2dB
	MCS 3	-88dBm	±2dB
	MCS 4	-84dBm	±2dB
	MCS 5	-81dBm	±2dB
	MCS 6	-78dBm	±2dB
	MCS 7	-77dBm	±2dB
5GHz 802.11n/ac VHT40	MCS 8	-74dBm	±2dB
	MCS 9	-71dBm	±2dB
	MCS 0	-94dBm	±2dB
	MCS 1	-94dBm	±2dB
	MCS 2	-92dBm	±2dB
	MCS 3	-88dBm	±2dB
	MCS 4	-84dBm	±2dB
	MCS 5	-81dBm	±2dB
5GHz 802.11ac VHT80	MCS 6	-78dBm	±2dB
	MCS 7	-77dBm	±2dB
	MCS 8	-73dBm	±2dB
	MCS 9	-70dBm	±2dB
	MCS 0	-89dBm	±2dB
	MCS 1	-88dBm	±2dB
	MCS 2	-85dBm	±2dB
	MCS 3	-81dBm	±2dB

Dimension Drawings



Units:mm

Ordering Information

HWRD600-TSH	2.4G Single Channel 23dBm, up to 28dBm & 5.8G Single Channel 27dBm, up to 32dBm (11ac wave 1); -20~70°C operating temperature
HWRD600-TSHW	2.4G Single Channel 23dBm, up to 28dBm & 5.8G Single Channel 27dBm, up to 32dBm (11ac wave 1); -40~70°C operating temperature