

# Product Information

## HWRD600-TF Series

### MU-MIMO 802.11ac Wave2 Industrial Access Point



## Features

- ❖ IEEE 802.11ac/a/b/g/n compliant
- ❖ 2.4GHz and 5GHz dual radios
- ❖ 2.4GHz 28dBm and 5GHz 28dBm 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

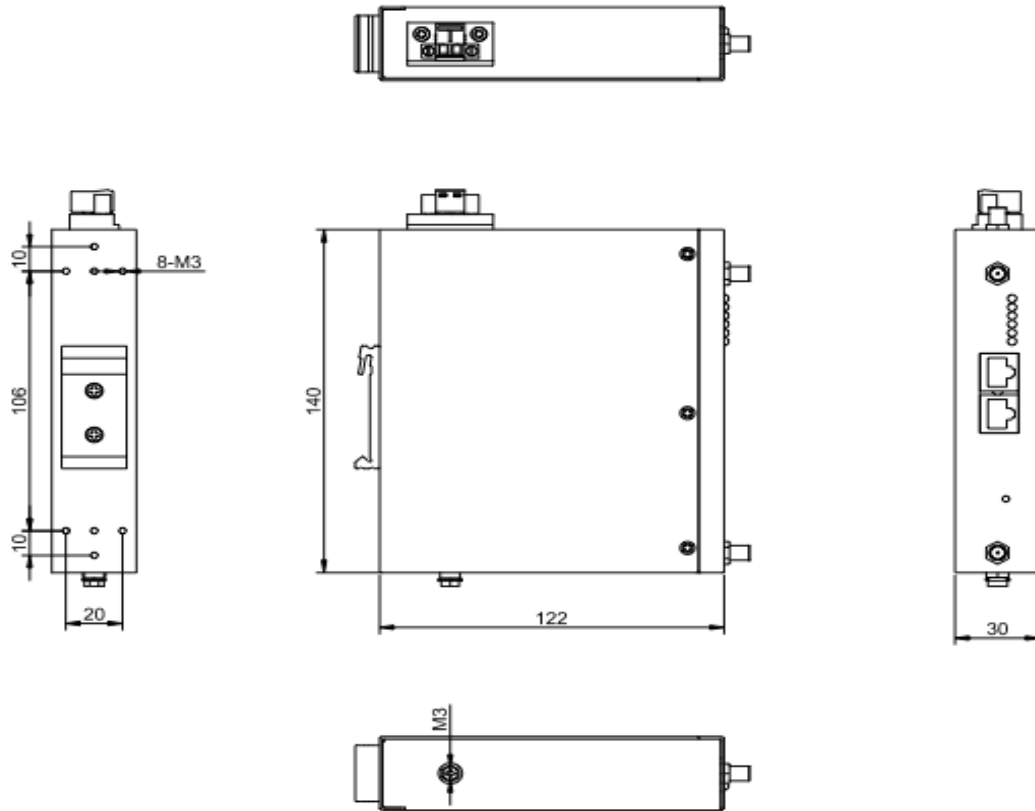
## RF Performance Table

	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 (2 chains)	Tolerance
5GHz 802.11a	6Mbps	25dBm	28dBm	±2dB
	9Mbps	25dBm	28dBm	±2dB
	12Mbps	25dBm	28dBm	±2dB
	18Mbps	25dBm	28dBm	±2dB
	24Mbps	24dBm	27dBm	±2dB
	36Mbps	23dBm	26dBm	±2dB
	48Mbps	22dBm	25dBm	±2dB
	54Mbps	21dBm	24dBm	±2dB
5GHz 802.11n/ac VHT20	MCS 0	25dBm	28dBm	±2dB
	MCS 1	25dBm	28dBm	±2dB
	MCS 2	25dBm	28dBm	±2dB
	MCS 3	24dBm	27dBm	±2dB
	MCS 4	23dBm	26dBm	±2dB
	MCS 5	22dBm	25dBm	±2dB
	MCS 6	21dBm	24dBm	±2dB
	MCS 7	20dBm	23dBm	±2dB
5GHz 802.11n/ac VHT40	MCS 8	18dBm	21dBm	±2dB
	MCS 0	25dBm	28dBm	±2dB
	MCS 1	25dBm	28dBm	±2dB
	MCS 2	25dBm	28dBm	±2dB
	MCS 3	24dBm	27dBm	±2dB
	MCS 4	23dBm	26dBm	±2dB
	MCS 5	22dBm	25dBm	±2dB
	MCS 6	21dBm	24dBm	±2dB
5GHz 802.11ac VHT80	MCS 7	20dBm	23dBm	±2dB
	MCS 8	19dBm	22dBm	±2dB
	MCS 9	18dBm	21dBm	±2dB
	MCS 0	25dBm	28dBm	±2dB
	MCS 1	25dBm	28dBm	±2dB
	MCS 2	25dBm	28dBm	±2dB
	MCS 3	24dBm	27dBm	±2dB
	MCS 4	23dBm	26dBm	±2dB
5GHz 802.11ac VHT80+80	MCS 5	22dBm	25dBm	±2dB
	MCS 6	21dBm	24dBm	±2dB
	MCS 7	20dBm	23dBm	±2dB
	MCS 8	18dBm	21dBm	±2dB
	MCS 9	17dBm	20dBm	±2dB

	Data Rate	RX Specifications Sensitivity	Tolerance
5GHz 802.11a	6Mbps	TBA	±2dB
	9Mbps	TBA	±2dB
	12Mbps	TBA	±2dB
	18Mbps	TBA	±2dB
	24Mbps	TBA	±2dB
	36Mbps	TBA	±2dB
	48Mbps	TBA	±2dB
	54Mbps	TBA	±2dB
5GHz 802.11n/ac VHT20	MCS 0	TBA	±2dB
	MCS 1	TBA	±2dB
	MCS 2	TBA	±2dB
	MCS 3	TBA	±2dB
	MCS 4	TBA	±2dB
	MCS 5	TBA	±2dB
	MCS 6	TBA	±2dB
	MCS 7	TBA	±2dB
5GHz 802.11n/ac VHT40	MCS 8	TBA	±2dB
	MCS 0	TBA	±2dB
	MCS 1	TBA	±2dB
	MCS 2	TBA	±2dB
	MCS 3	TBA	±2dB
	MCS 4	TBA	±2dB
	MCS 5	TBA	±2dB
	MCS 6	TBA	±2dB
5GHz 802.11ac VHT80	MCS 7	TBA	±2dB
	MCS 8	TBA	±2dB
	MCS 9	TBA	±2dB
	MCS 0	TBA	±2dB
	MCS 1	TBA	±2dB
	MCS 2	TBA	±2dB
	MCS 3	TBA	±2dB
	MCS 4	TBA	±2dB
5GHz 802.11ac VHT80+80	MCS 5	TBA	±2dB
	MCS 6	TBA	±2dB
	MCS 7	TBA	±2dB
	MCS 8	TBA	±2dB
	MCS 9	TBA	±2dB

## Dimension Drawings



Units:mm

## Ordering Information

HWRD600-TF	2.4G Single Channel 23 dBm, up to 28 dBm & 5.8G Single Channel 25 dBm, up to 28dBm (11ac wave 2); -20~70°C operating temperature
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