

# HWRD600-TS Series

## MU-MIMO 802.11ac Wave1 Industrial Access Point

### Features

- IEEE 802.11b/g/n compliant
- 2.4GHz and 5GHz dual radios
- 2.4GHz 28dBm and 5GHz 21dBm 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: -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

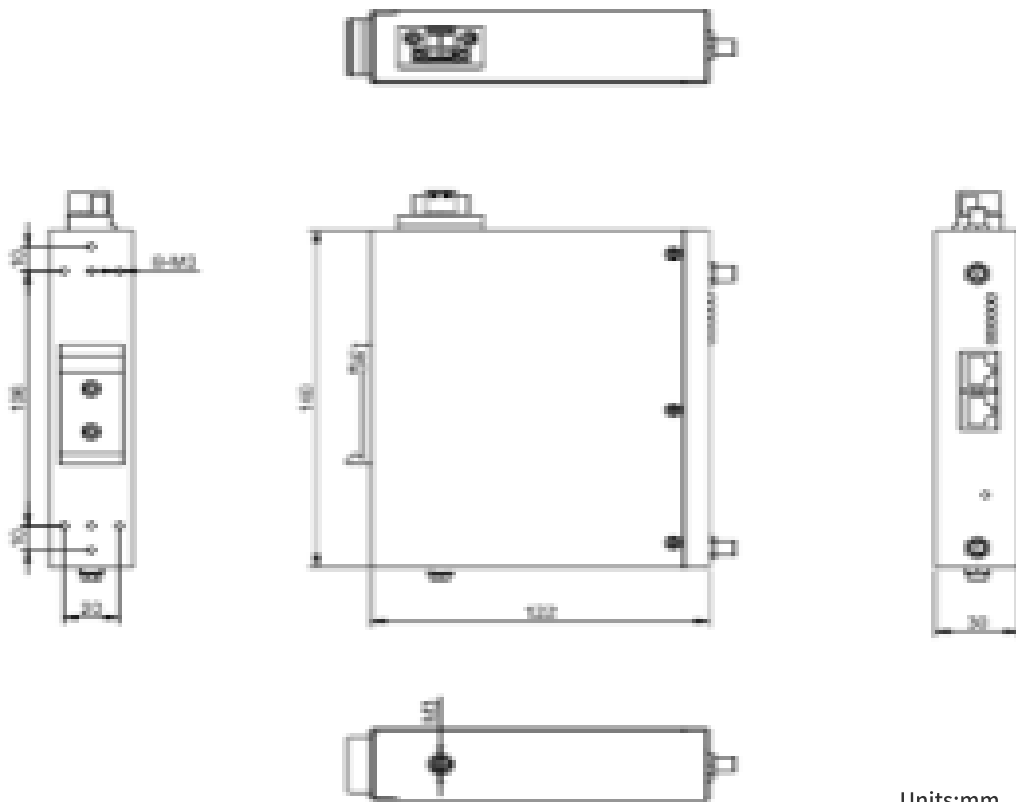
	Data Rate	TX Power(per chain)	TX Power(2 chains)	Tolerance
2.4GHz 802.11b	1Mbps	28dBm	33dBm	±2dB
	5.5Mbps	28dBm	33dBm	±2dB
	11Mbps	28dBm	33dBm	±2dB
2.4GHz 802.11g	6Mbps	30dBm	35dBm	±2dB
	9Mbps	30dBm	35dBm	±2dB
	12Mbps	30dBm	35dBm	±2dB
	18Mbps	30dBm	35dBm	±2dB
	24Mbps	30dBm	35dBm	±2dB
	36Mbps	28dBm	33dBm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

2.4GHz 802.11g	6Mbps			±2dB
	9Mbps			±2dB
	12Mbps			±2dB
	18Mbps			±2dB
	24Mbps			±2dB
	36Mbps			±2dB
	48Mbps			±2dB
	54Mbps			±2dB
2.4GHz 802.11n HT20	MCS 0			±2dB
	MCS 1			±2dB
	MCS 2			±2dB
	MCS 3			±2dB
	MCS 4			±2dB
	MCS 5			±2dB
	MCS 6			±2dB
	MCS 7			±2dB
2.4GHz 802.11n HT40	MCS 0			±2dB
	MCS 1			±2dB
	MCS 2			±2dB
	MCS 3			±2dB
	MCS 4			±2dB
	MCS 5			±2dB
	MCS 6			±2dB
	MCS 7			±2dB
	<b>Data Rate</b>	<b>TX Power(per chain)</b>	<b>TX Power(2 chains)</b>	<b>Tolerance</b>
5GHz 802.11a	6Mbps	27dBm	30dBm	±2dB
	9Mbps	27dBm	30dBm	±2dB
	12Mbps	27dBm	30dBm	±2dB
	18Mbps	27dBm	30dBm	±2dB
	24Mbps	27dBm	30dBm	±2dB
	36Mbps	25dBm	28dBm	±2dB
	48Mbps	24dBm	27dBm	±2dB
	54Mbps	23dBm	26dBm	±2dB

5GHz 802.11n/ac VHT20	MCS 0	26dBm	29dBm	±2dB
	MCS 1	25dBm	28dBm	±2dB
	MCS 2	25dBm	28dBm	±2dB
	MCS 3	24dBm	27dBm	±2dB
	MCS 4	24dBm	27dBm	±2dB
	MCS 5	23dBm	26dBm	±2dB
	MCS 6	22dBm	25dBm	±2dB
	MCS 7	21dBm	24dBm	±2dB
	MCS 8	20dBm	23dBm	±2dB
5GHz 802.11n/ac VHT40	MCS 0	26dBm	29dBm	±2dB
	MCS 1	25dBm	28dBm	±2dB
	MCS 2	25dBm	28dBm	±2dB
	MCS 3	24dBm	27dBm	±2dB
	MCS 4	24dBm	27dBm	±2dB
	MCS 5	23dBm	26dBm	±2dB
	MCS 6	22dBm	25dBm	±2dB
	MCS 7	21dBm	24dBm	±2dB
	MCS 8	20dBm	23dBm	±2dB
	MCS 9	19dBm	22dBm	±2dB
5GHz 802.11ac VHT80	MCS 0	26dBm	29dBm	±2dB
	MCS 1	25dBm	28dBm	±2dB
	MCS 2	25dBm	28dBm	±2dB
	MCS 3	24dBm	27dBm	±2dB
	MCS 4	24dBm	27dBm	±2dB
	MCS 5	23dBm	26dBm	±2dB
	MCS 6	22dBm	25dBm	±2dB
	MCS 7	21dBm	24dBm	±2dB
	MCS 8	20dBm	23dBm	±2dB
	MCS 9	19dBm	22dBm	±2dB
	<b>Data Rate</b>	<b>RX Specifications Sensitivity</b>		<b>Tolerance</b>
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
	MCS8	-74dBm	±2dB
5GHz 802.11n/ac VHT40	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
	MCS8	-73dBm	±2dB
	MCS9	-71dBm	±2dB
5GHz 802.11ac VHT80	MCS 0	-89dBm	±2dB
	MCS 1	-88dBm	±2dB
	MCS 2	-85dBm	±2dB
	MCS 3	-81dBm	±2dB
	MCS 4	-79dBm	±2dB
	MCS 5	-75dBm	±2dB
	MCS 6	-74dBm	±2dB
	MCS 7	-72dBm	±2dB
	MCS8	-70dBm	±2dB
	MCS9	-68dBm	±2dB

## Dimension Drawings



## Ordering Information

HWRD600-TS	2.4G Single Channel 23dBm, up to 28dBm & 5.8G Single Channel 27dBm, up to 30dBm (11ac wave 1); -20~70°C operating temperature
HWRD600-TSW	2.4G Single Channel 23dBm, up to 28dBm & 5.8G Single Channel 27dBm, up to 30dBm (11ac wave 1); -40~70°C operating temperature