

# Product Information

## HWRD301 Series

### 802.11a/n Long Range Industrial Access Point



## Features

- ❖ 64MB System Memory
- ❖ 16MB NOR Flash
- ❖ On-board 5GHz max 23dBm output power (per chain)
- ❖ IEEE 802.11n compliant & backward compatible with 802.11a
- ❖ 2 x 2 On-board radio up to 300Mbps physical data rate
- ❖ 2 x FE LAN RJ45 with Auto MDI/X
- ❖ Passive 24V Power Over Ethernet
- ❖ Integrated 48V IEEE 802.3af available as Option

## Applications

- Dual Band, Dual Concurrent AP
- 802.11a/n+802.11b/g/n AP
- Point to Point and Point to Multi-Point Wireless Bridge
- Wireless Base Station
- Wireless Customer-Premises Equipment (CPE)
- Support for Third Party 3G/LTE Radio Module

## Specifications

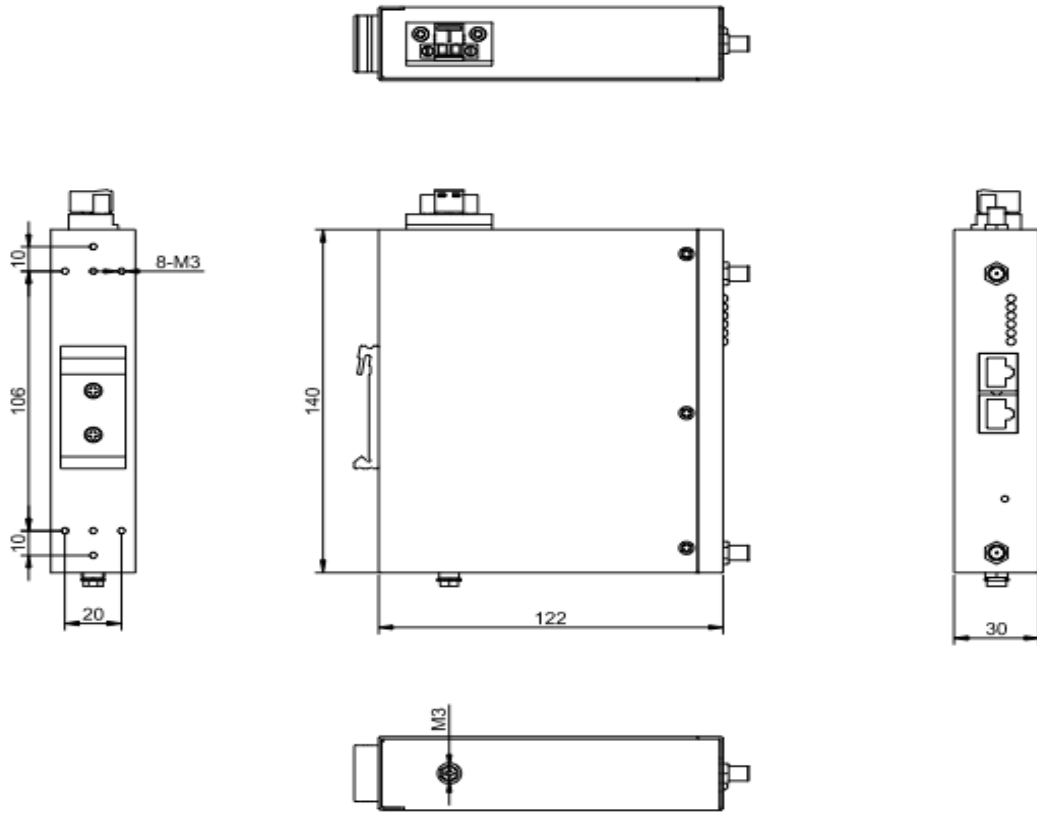
System Memory	64MB DDR2
NOR Flash	16MB
Wireless	Built in 5GHz 802.11b/g/n at 26dBm (aggregate) 2x U.FL connectors
Interface	2x Fast Ethernet Port (Auto MDI-X) 1x JTAG 14 Pin Connector1 1x Serial Port 4 Pin Connector2
Reset Button	Yes
LED	6x LED Indicators
Power over Ethernet	Passive PoE 24V (LV version), IEEE 802.3af/at or Passive PoE 36-56V (HV version)
DC Power	1x DC Jack Connector: 12-24V (LV version), 24-56V (HV version)
Power Consumption	5 Watt (Max)
Certification	FCC & CE Certification, RoHS Compliance
Environmental	Temperature: Operating: -20~70°C, Storage: -40~90°C, Humidity (non-condensing): Operating: 5% to 95%, Storage: Max. 90%
Other Features	Surge Suppressor, Watchdog Timer

## RF Performance Table

	Data Rate	TX Power per chain	TX Power (2 chains)	Tolerance
5GHz 802.11a	6Mbps	23dBm	26dBm	±2dB
	9Mbps	23dBm	26dBm	±2dB
	12Mbps	23dBm	26dBm	±2dB
	18Mbps	23dBm	26dBm	±2dB
	24Mbps	23dBm	26dBm	±2dB
	36Mbps	21dBm	24dBm	±2dB
	48Mbps	19dBm	22dBm	±2dB
	54Mbps	18dBm	21dBm	±2dB
5GHz 802.11n HT20	MCS 0	22dBm	25dBm	±2dB
	MCS 1	21dBm	24dBm	±2dB
	MCS 2	21dBm	24dBm	±2dB
	MCS 3	21dBm	24dBm	±2dB
	MCS 4	20dBm	23dBm	±2dB
	MCS 5	19dBm	22dBm	±2dB
	MCS 6	18dBm	21dBm	±2dB
	MCS 7	16dBm	19dBm	±2dB
5GHz 802.11n HT40	MCS 0	21dBm	24dBm	±2dB
	MCS 1	20dBm	23dBm	±2dB
	MCS 2	20dBm	23dBm	±2dB
	MCS 3	20dBm	23dBm	±2dB
	MCS 4	19dBm	22dBm	±2dB
	MCS 5	18dBm	21dBm	±2dB
	MCS 6	17dBm	20dBm	±2dB
	MCS 7	16dBm	19dBm	±2dB

	Data Rate	RX Sensitivity	Tolerance
5GHz 802.11a	6Mbps	-94dBm	±2dB
	9Mbps	-94dBm	±2dB
	12Mbps	-92dBm	±2dB
	18Mbps	-91dBm	±2dB
	24Mbps	-90dBm	±2dB
	36Mbps	-85dBm	±2dB
	48Mbps	-80dBm	±2dB
	54Mbps	-75dBm	±2dB
5GHz 802.11n HT20	MCS 0	-94dBm	±2dB
	MCS 1	-92dBm	±2dB
	MCS 2	-89dBm	±2dB
	MCS 3	-85dBm	±2dB
	MCS 4	-80dBm	±2dB
	MCS 5	-75dBm	±2dB
	MCS 6	-74dBm	±2dB
	MCS 7	-72dBm	±2dB
5GHz 802.11n HT40	MCS 0	-90dBm	±2dB
	MCS 1	-88dBm	±2dB
	MCS 2	-85dBm	±2dB
	MCS 3	-82dBm	±2dB
	MCS 4	-80dBm	±2dB
	MCS 5	-75dBm	±2dB
	MCS 6	-73dBm	±2dB
	MCS 7	-70dBm	±2dB

## Dimension Drawings



Units:mm

## Ordering Information

HWRD301	5.8G Single Channel 23dBm (11a/n), -20~70°C operating temperature
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