

# WUBR-508N Series

## 802.11abgn Dual-Band

## 2T2R USB Module



### Wireless USB Module for Embedded Solution

The WUBR-508N is powered by Ralink radio chip and features 2T2R 11abgn MIMO technology for higher throughput performance, reliability and range. It is designed to meet the demanding performance requirements of critical embedded applications.

#### Embedded Application :

Applications include Networking Equipment, USB Dongle, Industrial Computers, Medical devices, PoS (Point-of-Sale), Gaming Machine, Smart Home Gateway, etc.

#### Key Feature :

- Ralink RT5572
- Antenna: U.FL \* 2 for 2T2R
- Data Rates: allows link speeds up to 300Mbps.
- Support Windows XP, Vista, Win7, Linux driver

#### Specification :

Standards:	IEEE 802.11abgn (2T2R)
Chipset:	Ralink RT5572
Data Rate:	802.11b: 11Mbps / 802.11a/g: 54Mbps / 802.11n: 300Mbps
Operating Frequency:	IEEE 802.11abgn ISM Band, 2.400GHz ~ 2.4835GHz, 5.150MHz ~ 5.825MHz *Subject to local regulations
Interface:	USB
Form Factor:	4pin pin-header / 4-Pin Wafer con /USB Type A
Antenna:	2 x UFL connector or printed antenna for 2T2R
Modulation:	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11a/g: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
Operating Voltage:	5V
Temperature Range:	0°C ~ +50°C (Storage) / -10°C ~ +70°C (Storage)
Humidity (Non-Condensing):	Operating Humidity (non-condensing): 5% ~ 90% Storage Humidity (non-condensing): 5% ~ 95%
Power Consumption:	Continue TX: Max 450mA@2TX / Continue RX: Max 175mA@2RX
Dimension (in mm):	40 x 20.2 x 8.8 mm (±0.5mm)
Weight (g):	< 7g
Driver Support:	Windows XP, Vista, Win7, Linux
Security	64/128-bits WEP, WPA, WPA2, 802.1x

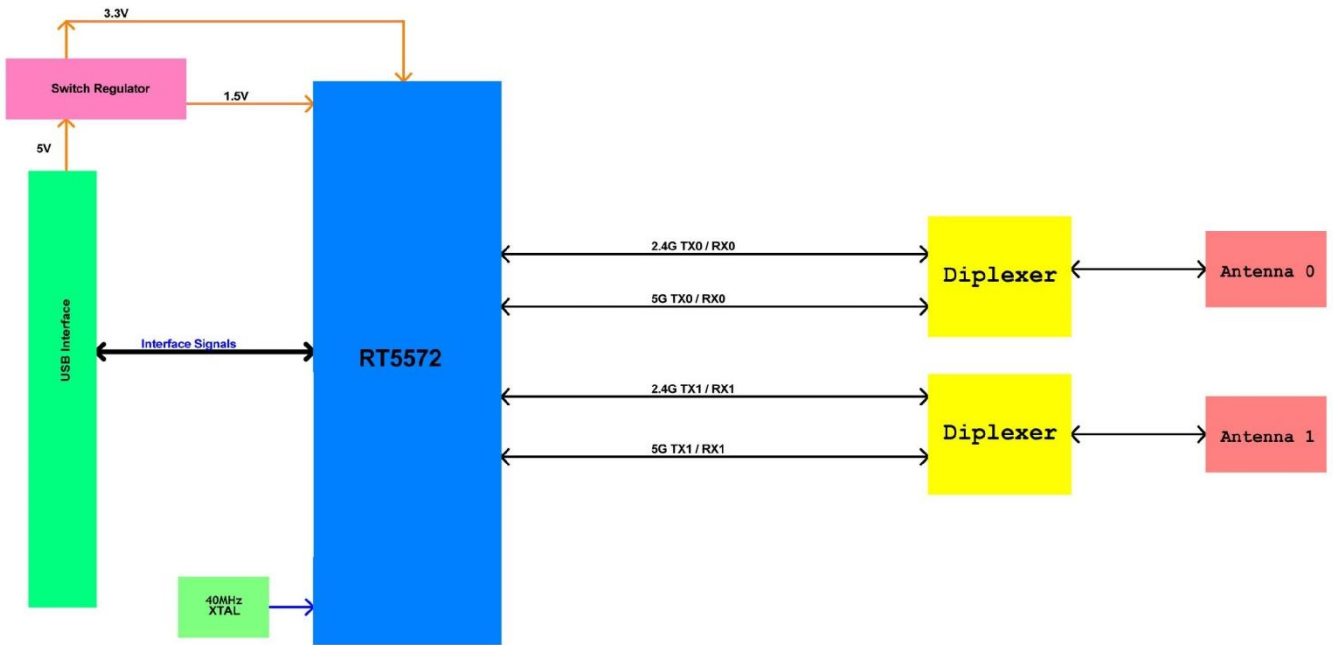
OUTPUT POWER & SENSITIVITY		
802.11g		
Data Rate	Tx $\pm$ 2dBm	Rx Sensitivity
54Mbps	15dBm	$\leq$ -74dBm

802.11n / 2.4GHz				
	Data Rate	Tx $\pm$ 2dBm (1TX)	Tx $\pm$ 2dBm (2TX)	Rx Sensitivity
HT20	MCS7	13dBm	16dBm	$\leq$ -72dBm
	MCS7	13dBm	16dBm	$\leq$ -69dBm

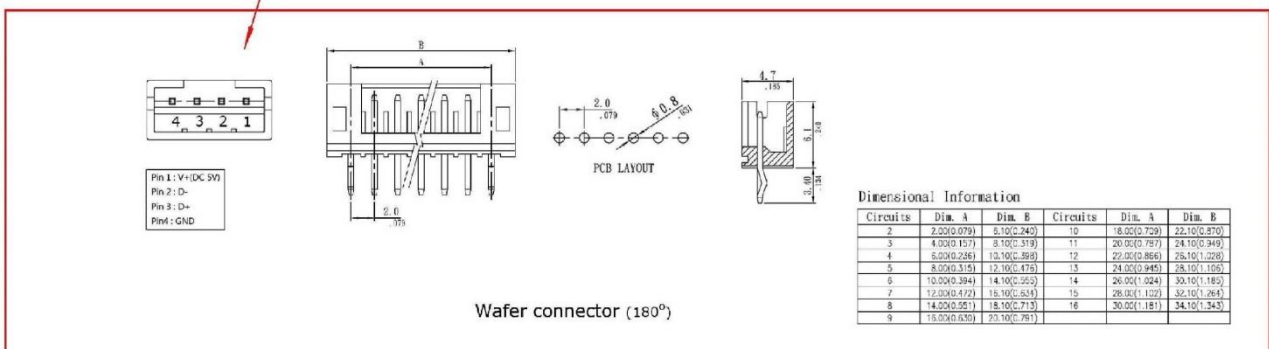
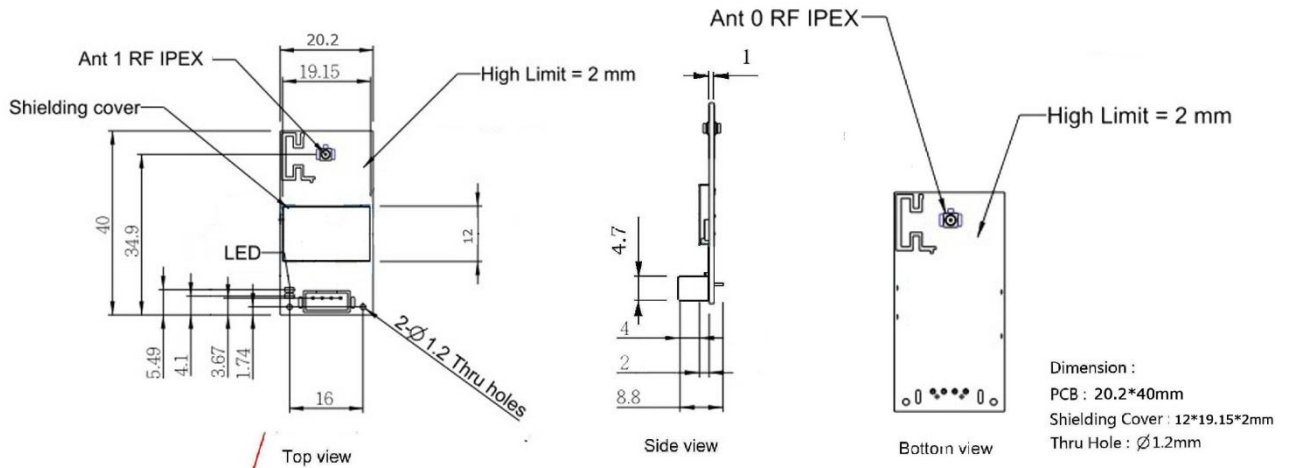
802.11a		
Data Rate	Tx $\pm$ 2dBm	Rx Sensitivity
54Mbps	13dBm	$\leq$ -71dBm

802.11n / 5GHz				
	Data Rate	Tx $\pm$ 2dBm (1TX)	Tx $\pm$ 2dBm (2TX)	Rx Sensitivity
HT20	MCS7	12dBm	15dBm	$\leq$ -71dBm
	MCS7	12dBm	15dBm	$\leq$ -71dBm

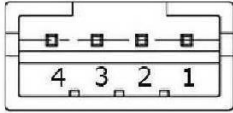
### Block Diagram



### Mechanical Dimension (mm)



### Pin Assignment



Pin#	Pin Name	Description	Pin#	Pin Name	Description
1	V+	Voltage input, 5V	2	D-	Date input(-)
3	D+	Date input(+)	4	GND	Voltage input, GND-

### WUBR-508N order information

Model	Description
WUBR-508N(M4)	U.FL+4-Pin con
WUBR-508N(M4W)	U.FL+4-Pin Wafer con
WUBR-508N(MU)	U.FL+USB Type A
WUBR-508N(P4)	Printed Antenna +4-Pin con
WUBR-508N(P4W)	Printed Antenna +4-Pin Wafer con
WUBR-508N(PU)	Printed Antenna +USB Type A