RouterBOARD R5H

High power 802.11a miniPCI card with a sturdy MMCX antenna connector.

Key Features and Benefits

- Atheros **AR5414A B2B**
- Average power up to **25dBm**
- Flexible DC supply, 3.3Vdc or 3.3Vdc+5.0Vdc
- Easily shift one onboard resistor to change power supply
- External Screw hole reserved against vibration
- DIP type MMCX RF connectors provide robust assembly for antenna
- Industrial Operation temp. : -40~+80 degrees C
- Heat sink design provides reliable high power RF performance
- Wide dynamic power control range: 2.5dBm~25dBm(+/- 2dB)
- Integrated RF ESD and surge protector
- High rejection filter to reduce interference

This industrial grade 802.11a wireless card from MikroTik is a new standard in quality. **MMCX** antenna connector provides a secure and sturdy connection to your antenna, and a special screw connection allows you to securely fasten the card in it's place.

The R5H can work in very severe conditions - the operational **temperature** can range from -40 to +80 degrees Celsius, which is much more than any competing product.

The R5H provides three kinds of filters in RX path for selection to reject unwanted signals. It will increase alternate channel rejection capability, so that more bandwidth can be used for communication. Because of the high **sensitivity** of R5H, it can achieve the same distance as competing products with higher power.

Average Sensitivity

Condition	MIN	TYP	MAX	Units
6Mbps	-96	-93	-90	DBm
9Mbps	-96	-93	-90	
12Mbps	-94	-91	-88	
18Mbps	-92	-89	-86	
24Mbps	-89	-86	-83	
36Mbps	-85	-82	-79	
48Mbps	-80	-77	-74	
54Mbps	-78	-75	-72	

Average TX Power

5GHz	MHz					
	5170	5400	5500	5700	5805	5825
6M	23.5	24	24.5	25	25	25
9M	23.5	24	24.5	25	25	25
12M	23.5	24	24.5	25	25	25
18M	23.5	24	24.5	25	25	25
24M	23.5	24	24	25	25	25
36M	22.5	23	24	24	24	24
48M	20	20	21	22	21.5	21.5
54M	19.5	19.5	20	21	20.5	20.5

ESD Surge Protection

ESD	+/- 1kV	+/- 2kV	+/- 3kV	+/- 4kV	+/- 5kV	+/- 6kV	+/- 7kV	+/- 8kV	+/- 9kV	+/- 10kV	+/- 11kV	+/- 12kV	+/- 13kV
Competitors	PASS	PASS	-PASS	PASS	PASS	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL	FAIL
R5H	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS