## Built-to-Customize™





# **nM1-Series Product Brochure**

Single Stream SISO, 1x1, 11 b/g/n, Mini PCI Radio Modules

Vizmonet offers wide range of **Carrier-Class-Customized** wireless communication modules tailored made to suit OEM requirements. Under this SISO 802.11n portfolio, High-performance wireless communication radio modules based on QualComm Atheros base Band Chipset are available for OEM's choice.

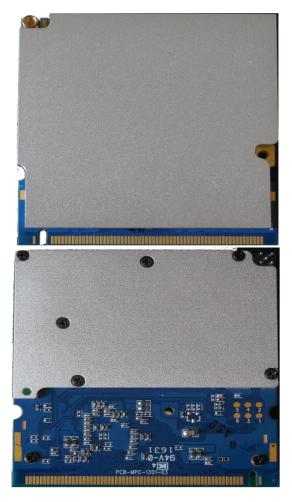
These modules, built with design concepts focussed on customization requirements are engineered with fine precision to meet stringent performance metrics set by Vizmonet Quality Standards.

## **STANDARD FEATURES**

- IEEE 802.11b/g/n standards compliant with Base band chip AR9223-AC1A
- 5MHz/10MHz/20MHz/40MHz Channel Bandwidth
- 1xMMCX Antenna connector
- High TX Power of up to +29 dBm for lower data rates
- Mini PCI Type IIIA form factor

## **CUSTOM FEATURES**

- Custom channel Plan & Jumper support optional two alternate Channel Plan
- Custom form-factor
- Custom heat sink, shield cover & metal bracket
- Custom MAC ID , PCI device Id & other OEM specific PCI data
- Support for Regulatory Certification Approvals in OEM's name

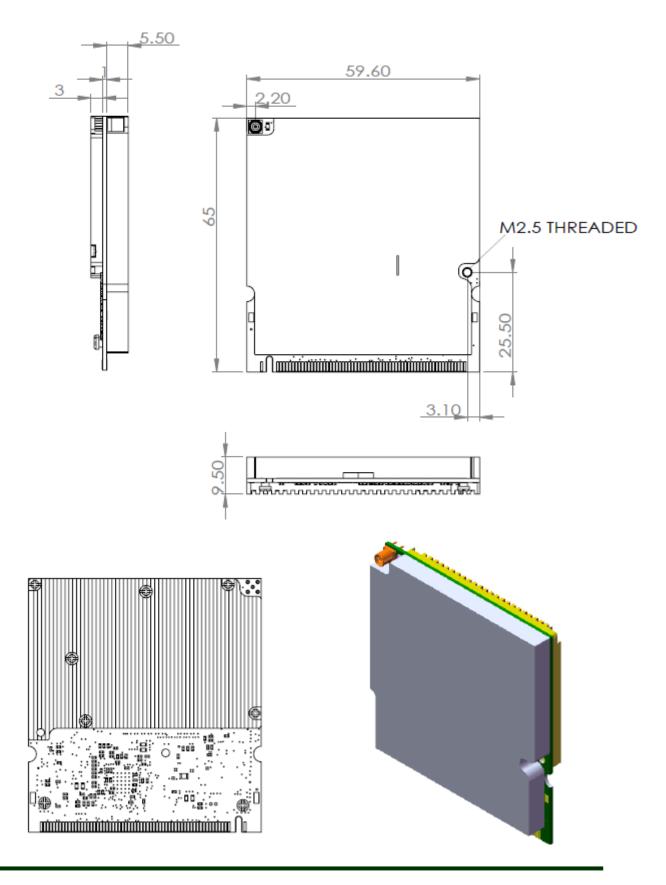


## MODEL MATRIX

MODEL	FREQUENCY (MHz)	STANDARD	BAND	CHIPSET
nM1-300	300MHz to 400MHz	11 b/g/n	License Band	AR9223-AC1A
nM1-400	400MHz to 500MHz	11 b/g/n	License Band	AR9223-AC1A
nM1-420	420 MHz to 450 MHz	11 b/g/n	70 cm, HAM Band	AR9223-AC1A
nM1-500	500 MHz to 600 MHz	11 b/g/n	TVWS Band	AR9223-AC1A
nM1-600	600MHz to 700MHz	11 b/g/n	TVWS Band	AR9223-AC1A
nM1-700	700MHz to 800MHz	11 b/g/n	TVWS Band	AR9223-AC1A
nM1-800	800MHz to 900MHz	11 b/g/n	License Band	AR9223-AC1A
nM1-900	900MHz to 1000 MHz	11 b/g/n	License Band	AR9223-AC1A
nM1-902	902 MHz to 928 MHz	11 b/g/n	ISM Band	AR9223-AC1A
nM1-1000	1000 MHz to 1500 MHz	11 b/g/n	License Band	AR9223-AC1A

## RADIO SPECIFICATION (300 MHz to 1500 MHz)

RADIO TX/RX PERFORMANCE, 20 MHz BW								
11 g	DATA RATE	MODULATION	TX POWER <u>+</u> 1 dBm	TX CURRENT (A) AT 3.3V <u>+</u> 0.1A	RX SENSITIVITY <u>+</u> 2 dBm	RX CURRENT(A) AT 3.3V <u>+</u> 0.1A		
	6 Mbps	BPSK	29	1.3	-92	0.15		
	9 Mbps	BPSK	29	1.3	-91	0.15		
	12 Mbps	QPSK	29	1.3	-91	0.15		
	18 Mbps	QPSK	29	1.3	-88	0.15		
	24 Mbps	16QAM	29	1.3	-84	0.15		
	36 Mbps	16QAM	27	1.2	-81	0.15		
	48 Mbps	64QAM	25	1.1	-75	0.15		
	54 Mbps	64QAM	24	1.1	-72	0.15		
11 b	1 Mbps	BPSK	30	1.3	-95	0.15		
	2 Mbps	QPSK	30	1.3	-93	0.15		
	5.5 Mbps	ССК	30	1.3	-91	0.15		
	11 Mbps	ССК	30	1.3	-90	0.15		
11 n HT20	MCS0/8	BPSK	29	1.3	-91	0.15		
	MCS1/9	QPSK	29	1.3	-90	0.15		
	MCS2/10	QPSK	29	1.3	-87	0.15		
	MCS3/11	16QAM	29	1.3	-83	0.15		
	MCS4/12	16QAM	27	1.2	-80	0.15		
	MCS5/13	64QAM	24	1.1	-73	0.15		
	MCS6/14	64QAM	22	0.9	-72	0.15		
	MCS7/15	64QAM	21	0.9	-71	0.15		



**MECHANICAL DIMENSIONS** 

### Disclaimer

The information in this document is being provided in connection with Vizmonet products, which are subject to continuous developments and improvements. While every effort is made to ensure that the information contained in this document is correct and accurate at the time of this printing, Vizmonet makes no representations or warranties with respect to the accuracy of the information and is not liable for errors or mistakes that may arise. However, Vizmonet reserves the right to make changes to specifications and product descriptions at any time without notice. Vizmonet does not assume any responsibility for the use of the described product; neither does it convey any license under its patent rights, or the rights of others. Vizmonet products are not intended, authorized, or warranted for use as components in applications intended to support or sustain life.

#### Trademarks

Built-to-Customize  $^{TM}$  is a trademark of Vizmonet. It represents the wide range of high Performance radio modules that are tailored made to meet OEM Customer's requirements. All other trademarks, registered trademarks and product names are the sole property of their respective owners.

© 2016, Vizmonet. All rights reserved.

#### **Contact Information**

Web site: https://vizmonet.com

Email: enquiry@vizmonet.com

#### Address:

Vizmonet Pte Ltd 21, Woodlands Close #03-01, Primz Biz Singapore 737 854