

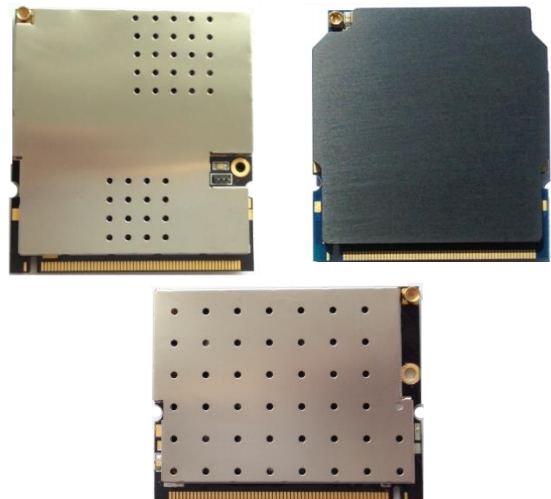


gM1-Series

Single Stream, 11b/g Mini PCI Radio Modules

Vizmonet offers wide range of **Carrier-Class-Customized** wireless communication modules tailored made to suit OEM requirements. Under this Legacy 802.11b/g 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 standards compliant with Base band chip AR5414A-001
- 5MHz/10MHz/20MHz/40MHz Channel Bandwidth
- 1xMMCX Antenna connector
- High TX Power of up to +30 dBm for lower data rates
- Mini PCI Type IIIA form factor

CUSTOM FEATURES

- Custom channel Plan
- Industrial grade Temperature (-40 deg C to +85 deg C) with the Base-band chip AR5414A-B2B
- Custom form-factor
- Custom heat sink, shield cover & metal bracket
- Custom MAC ID , PCI device Id & other OEM specific PCI data
- Support for FCC/IC/CE certification in OEM's name

MODEL MATRIX

MODEL	FREQUENCY (MHz)	BAND
gM1-300 gM1L-300	300MHz to 400MHz	License Band
gM1-400 gM1L-400	400MHz to 500MHz	License Band
gM1-420 gM1L-420	420 MHz to 450 MHz	70 cm, HAM Band
gM1-500 gM1L-500	500 MHz to 600 MHz	TVWS Band
gM1-600 gM1L-600	600MHz to 700MHz	TVWS Band
gM1-700 gM1L-700	700MHz to 800MHz	TVWS Band
gM1-800 gM1L-800	800MHz to 900MHz	License Band
gM1-900 gM1L-900	900MHz to 1GHz	License Band
gM1-902 gM1L-902	902 MHz to 928 MHz	ISM Band
gM1-1000 gM1L-1000	1000 MHz to 1500 MHz	License Band
gM1-2300	2300 MHz to 2525 MHz	License Band, ISM Band
gM1-MG-2300	2300 MHz to 2525 MHz	License Band, ISM Band
gM1-2400	2400 MHz to 2483.5 MHz	ISM Band

RADIO SPECIFICATION – 300 MHz to 1500 MHz

RADIO TX/RX PERFORMANCE, 20 MHz BW						
	DATA RATE	MODULATION	TX POWER ± 1 dBm	TX CURRENT (A) AT 3.3V ± 0.1A	RX SENSITIVITY ± 2 dBm	RX CURRENT(A) AT 3.3V ± 0.1A
11 g	6 Mbps	BPSK	29	1.3	-92	0.38
	9 Mbps	BPSK	29	1.3	-91	0.38
	12 Mbps	QPSK	29	1.3	-91	0.38
	18 Mbps	QPSK	29	1.3	-88	0.38
	24 Mbps	16QAM	29	1.3	-84	0.38
	36 Mbps	16QAM	27	1.2	-81	0.38
	48 Mbps	64QAM	25	1.1	-75	0.38
	54 Mbps	64QAM	24	1.1	-72	0.38
11 b	1 Mbps	BPSK	30	1.3	-95	0.38
	2 Mbps	QPSK	30	1.3	-93	0.38
	5.5 Mbps	CCK	30	1.3	-91	0.38
	11 Mbps	CCK	30	1.3	-90	0.38

RADIO SPECIFICATION – 300 MHz to 1500 MHz “L” Version

RADIO TX/RX PERFORMANCE, 20 MHz BW, LEGACY 11B/G						
	DATA RATE	MODULATION	TX POWER ± 1 dBm	TX CURRENT (A) AT 3.3V ± 0.1A	RX SENSITIVITY ± 2 dBm	RX CURRENT(A) AT 3.3V ± 0.1A
11 g	6 Mbps	BPSK	27	1.0	-92	0.38
	9 Mbps	BPSK	27	1.0	-91	0.38
	12 Mbps	QPSK	27	1.0	-91	0.38
	18 Mbps	QPSK	27	1.0	-88	0.38
	24 Mbps	16QAM	27	1.0	-84	0.38
	36 Mbps	16QAM	24	0.9	-81	0.38
	48 Mbps	64QAM	23	0.8	-75	0.38
	54 Mbps	64QAM	21	0.7	-72	0.38
11 b	1 Mbps	BPSK	27	1.2	-95	0.38
	2 Mbps	QPSK	27	1.0	-93	0.38
	5.5 Mbps	CCK	27	1.0	-91	0.38
	11 Mbps	CCK	27	1.0	-90	0.38

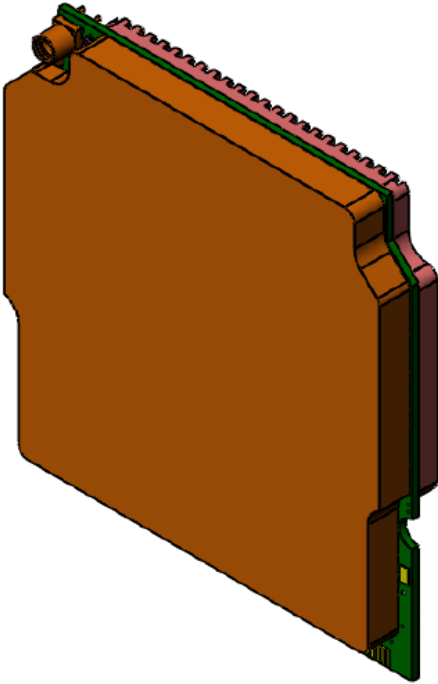
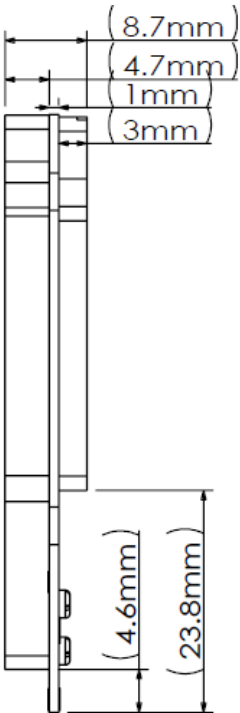
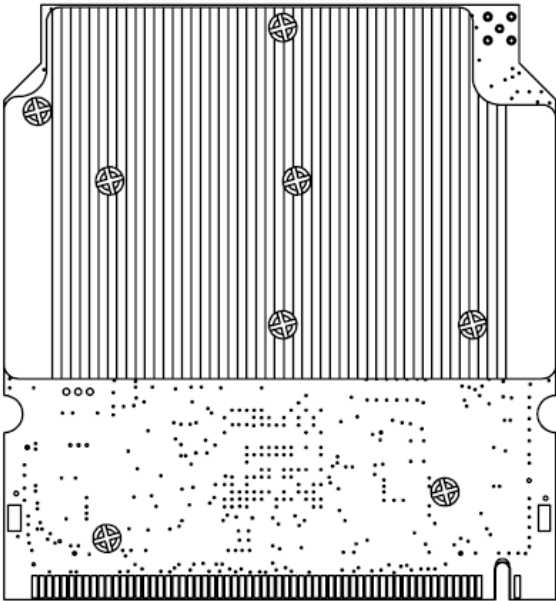
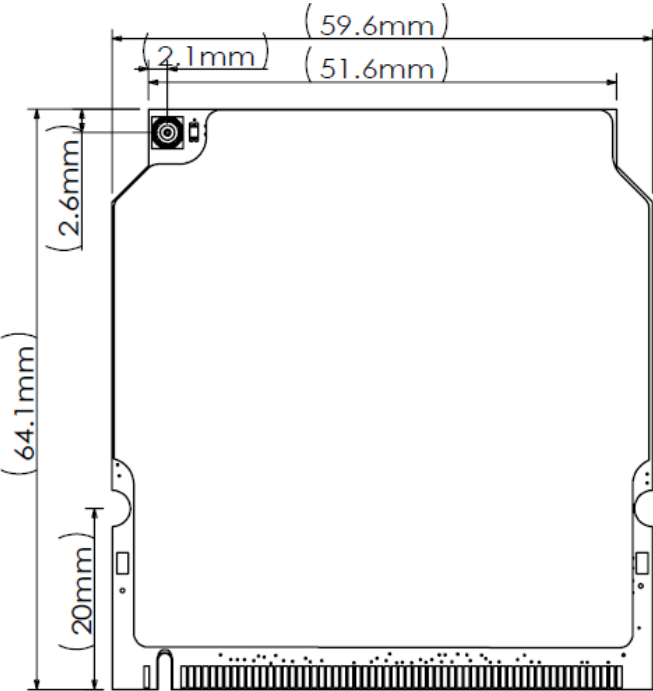
RADIO SPECIFICATION – 2300 MHz to 2525 MHz (gM1-MG-2300)

RADIO TX PERFORMANCE @ BW=20 MHz						
	DATA RATE	MODULATION	TX POWER ± 1 dBm	TX CURRENT (A) AT 3.3V ± 0.1A	RX SENSITIVITY ± 2 dBm	RX CURRENT (A) AT 3.3V ± 0.1A
11 g	6 Mbps	BPSK	32	2.4	-93	0.3
	9 Mbps	BPSK	32	2.4	-92	0.3
	12 Mbps	QPSK	32	2.4	-91	0.3
	18 Mbps	QPSK	32	2.4	-90	0.3
	24 Mbps	16QAM	32	2.4	-85	0.3
	36 Mbps	16QAM	30	1.9	-83	0.3
	48 Mbps	64QAM	27	1.6	-77	0.3
	54 Mbps	64QAM	26	1.5	-74	0.3
11 b	1 Mbps	BPSK	32	2.4	-97	0.3
	2 Mbps	QPSK	32	2.4	-94	0.3
	5.5 Mbps	CCK	32	2.4	-93	0.3
	11 Mbps	CCK	32	2.4	-90	0.3

RADIO SPECIFICATION – 2300 MHz to 2525 MHz (gM1-2300 & gM1-2400)

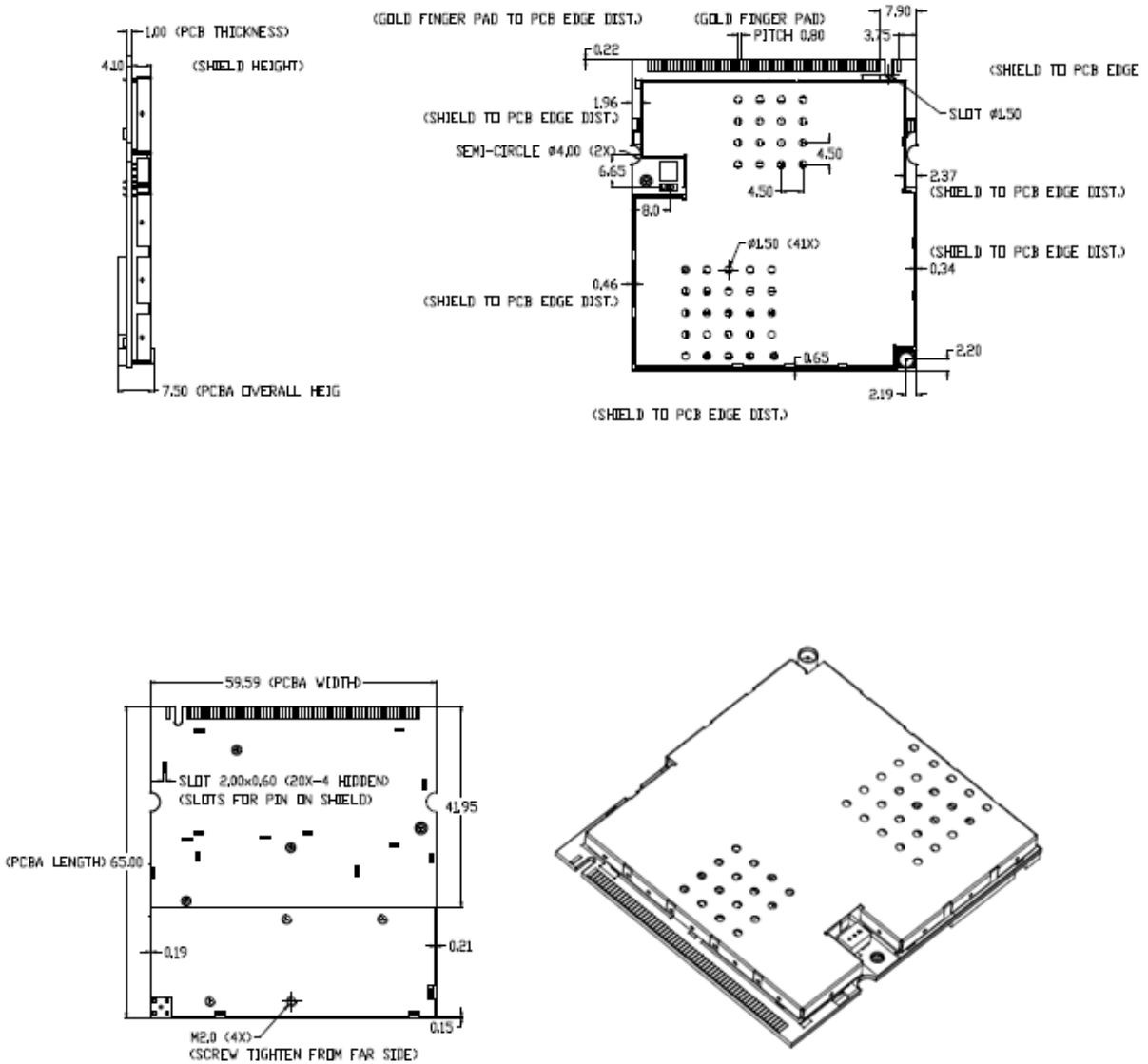
RADIO TX PERFORMANCE @ BW=20 MHz						
	DATA RATE	MODULATION	TX POWER ± 1 dBm	TX CURRENT (A) AT 3.3V ± 0.1A	RX SENSITIVITY ± 2 dBm	RX CURRENT (A) AT 3.3V ± 0.1A
11 g	6 Mbps	BPSK	30	1.15	-93	0.3
	9 Mbps	BPSK	30	1.15	-92	0.3
	12 Mbps	QPSK	30	1.15	-91	0.3
	18 Mbps	QPSK	30	1.15	-90	0.3
	24 Mbps	16QAM	30	1.15	-85	0.3
	36 Mbps	16QAM	28	0.90	-83	0.3
	48 Mbps	64QAM	25	0.80	-77	0.3
	54 Mbps	64QAM	24	0.75	-74	0.3
11 b	1 Mbps	BPSK	30	1.15	-97	0.3
	2 Mbps	QPSK	30	1.15	-94	0.3
	5.5 Mbps	CCK	30	1.15	-93	0.3
	11 Mbps	CCK	30	1.15	-90	0.3

MECHANICAL DIMENSIONS – 300 MHz to 1500 MHz



MECHANICAL DIMENSIONS – 300 MHz to 1500 MHz “L” Version

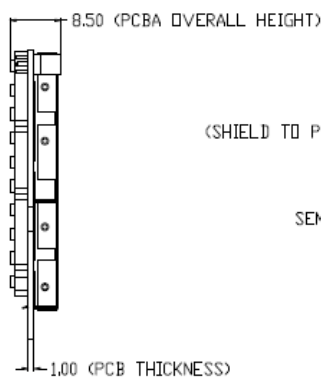
Note: Standard version is supplied without heatsink. However the below picture is shown as a reference with optional Heat sink



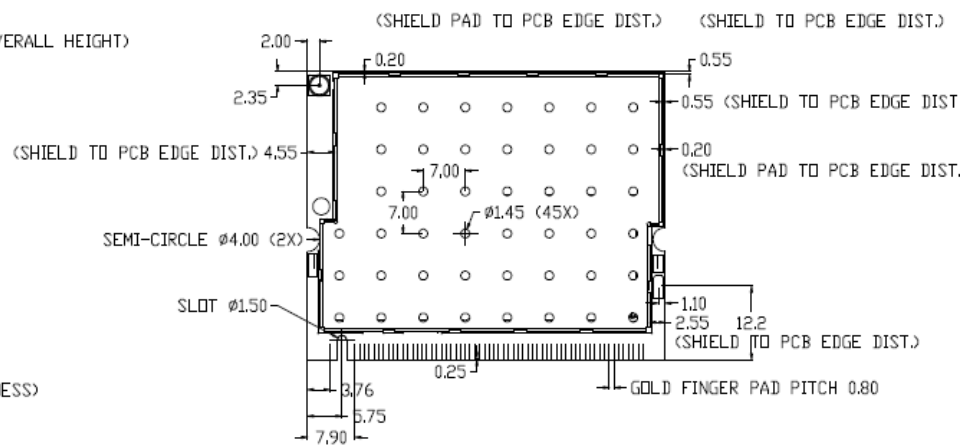
MECHANICAL DIMENSIONS – gM1-MG-2300

Note: gM1-2300 and gM1-2400 are supplied with no heat sink & share the same dimension as marked in the below picture.

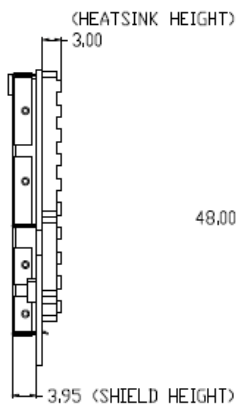
SIDE VIEW - LEFT



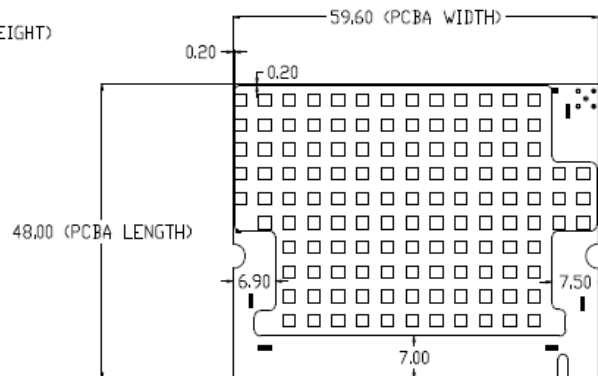
TOP VIEW



SIDE VIEW - RIGHT



BOTTOM VIEW



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