



aM1-Series

Single Stream, 11a Mini PCI Radio Modules

Vizmonet offers wide range of **Carrier-Class-Customized** wireless communication modules tailored made to suit OEM requirements. Under this Legacy 802.11a portfolio, High-performance embedded radio modules are available with Qualcomm Atheros base Band Chipset AR5414A-001.

Built over Vizmonet's innovative Built-to-Customize™ platform, these modules are engineered with fine precision to meet stringent performance metrics set by Vizmonet Quality Standards.



STANDARD FEATURES

- IEEE 802.11a standards compliant with Base band chip AR5414A-001
- 5MHz/10MHz/20MHz/40MHz Channel Bandwidth
- x1 MMCX Antenna connector
- High TX Power & Superior RX Sensitivity
- Mini PCI Type IIIA form factor 59.6 mm x 50 mm

CUSTOM FEATURES

- Custom form-factor
- Custom heat sink, shield cover & metal bracket
- Custom MAC ID , PCI device Id & other OEM specific PCI ID
- Support for Regulatory Certification Approvals in OEM's name

MODEL MATRIX

MODEL	FREQUENCY (MHz)	BAND
aM1-4800	4800MHz to 5000MHz	License Band
aM1-4940	4940MHz to 4950MHz	US Public Safety Band
aM1-5150	5150 MHz to 5850 MHz	ISM Band
aM1-5850	5850 MHz to 5925 MHz	ITS Band
aM1-5925	5925 MHz to 6000 MHz	License Band

RADIO SPECIFICATION aM1-4800

RADIO TX/RX PERFORMANCE, 20 MHz BW						
4800 MHz to 5000 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
	6 Mbps	BPSK	30	1.7	-93	0.38
	9 Mbps	BPSK	30	1.7	-92	0.38
	12 Mbps	QPSK	30	1.7	-91	0.38
	18 Mbps	QPSK	30	1.7	-90	0.38
	24 Mbps	16QAM	30	1.7	-85	0.38
	36 Mbps	16QAM	27	1.4	-83	0.38
	48 Mbps	64QAM	26	1.3	-77	0.38
	54 Mbps	64QAM	25	1.2	-74	0.38

RADIO SPECIFICATION aM1-4940

RADIO TX/RX PERFORMANCE, 20 MHz BW						
4940 MHz to 4990 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
	6 Mbps	BPSK	30	1.7	-93	0.38
	9 Mbps	BPSK	30	1.7	-92	0.38
	12 Mbps	QPSK	30	1.7	-91	0.38
	18 Mbps	QPSK	30	1.7	-90	0.38
	24 Mbps	16QAM	30	1.7	-85	0.38
	36 Mbps	16QAM	27	1.4	-83	0.38
	48 Mbps	64QAM	26	1.3	-77	0.38
	54 Mbps	64QAM	25	1.2	-74	0.38

RADIO SPECIFICATION aM1-5150

RADIO TX/RX PERFORMANCE, 20 MHz BW						
5100 MHz to 5850 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
	6 Mbps	BPSK	29	1.3	-93	0.38
	9 Mbps	BPSK	29	1.3	-92	0.38
	12 Mbps	QPSK	29	1.3	-91	0.38
	18 Mbps	QPSK	29	1.3	-90	0.38
	24 Mbps	16QAM	29	1.3	-85	0.38
	36 Mbps	16QAM	26	1.1	-83	0.38
	48 Mbps	64QAM	24	0.9	-77	0.38
	54 Mbps	64QAM	23	0.8	-74	0.38

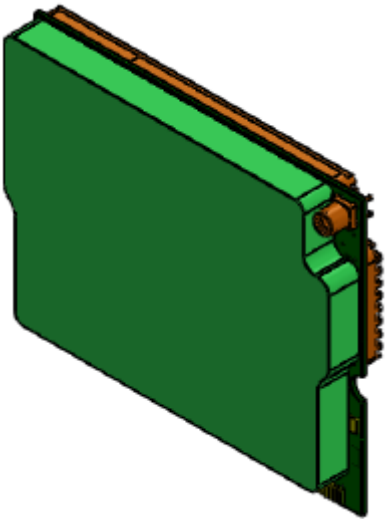
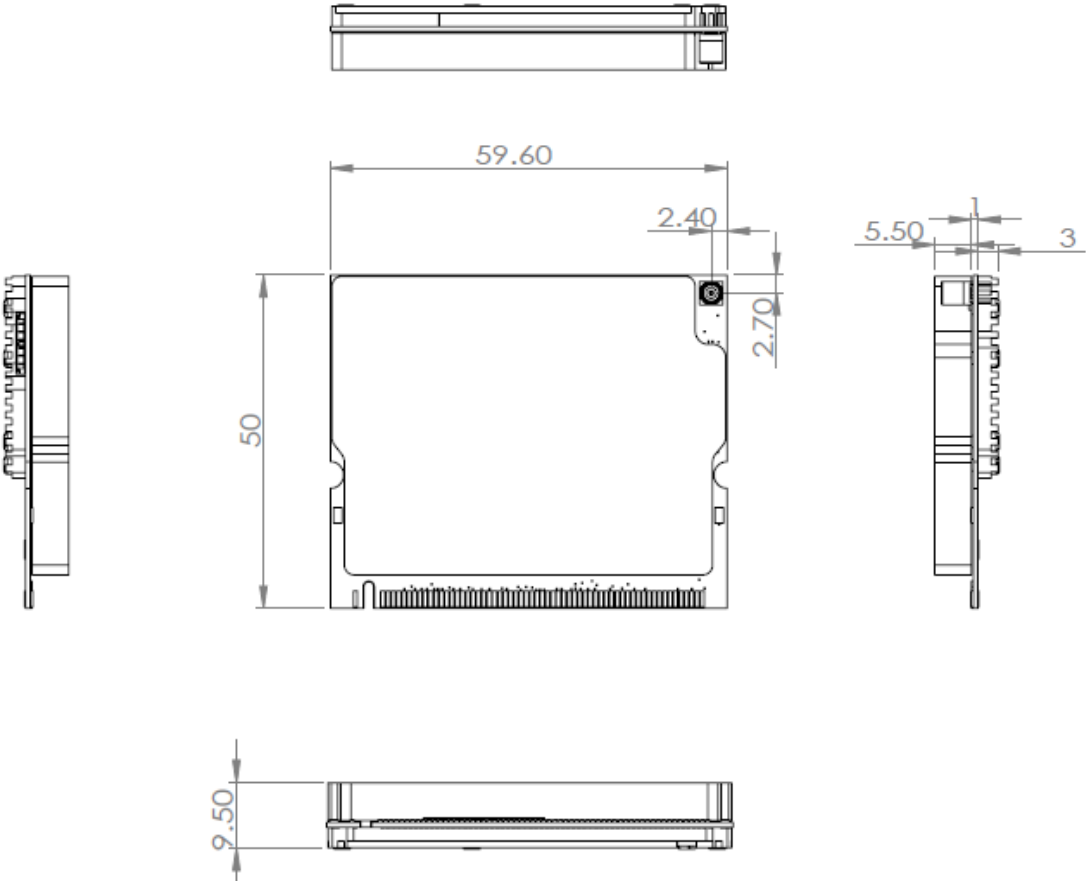
RADIO SPECIFICATION aM1-5850

RADIO TX/RX PERFORMANCE, 20 MHz BW						
5850 MHz to 5925 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
	6 Mbps	BPSK	29	1.3	-93	0.38
	9 Mbps	BPSK	29	1.3	-92	0.38
	12 Mbps	QPSK	29	1.3	-91	0.38
	18 Mbps	QPSK	29	1.3	-90	0.38
	24 Mbps	16QAM	29	1.3	-85	0.38
	36 Mbps	16QAM	26	1.1	-83	0.38
	48 Mbps	64QAM	24	0.9	-77	0.38
	54 Mbps	64QAM	23	0.8	-74	0.38

RADIO SPECIFICATION

RADIO TX/RX PERFORMANCE, 20 MHz BW						
5900 MHz to 6000 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
	6 Mbps	BPSK	29	1.3	-93	0.38
	9 Mbps	BPSK	29	1.3	-92	0.38
	12 Mbps	QPSK	29	1.3	-91	0.38
	18 Mbps	QPSK	29	1.3	-90	0.38
	24 Mbps	16QAM	29	1.3	-85	0.38
	36 Mbps	16QAM	26	1.1	-83	0.38
	48 Mbps	64QAM	24	0.9	-77	0.38
	54 Mbps	64QAM	23	0.8	-74	0.38

MECHANICAL DIMENSIONS



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