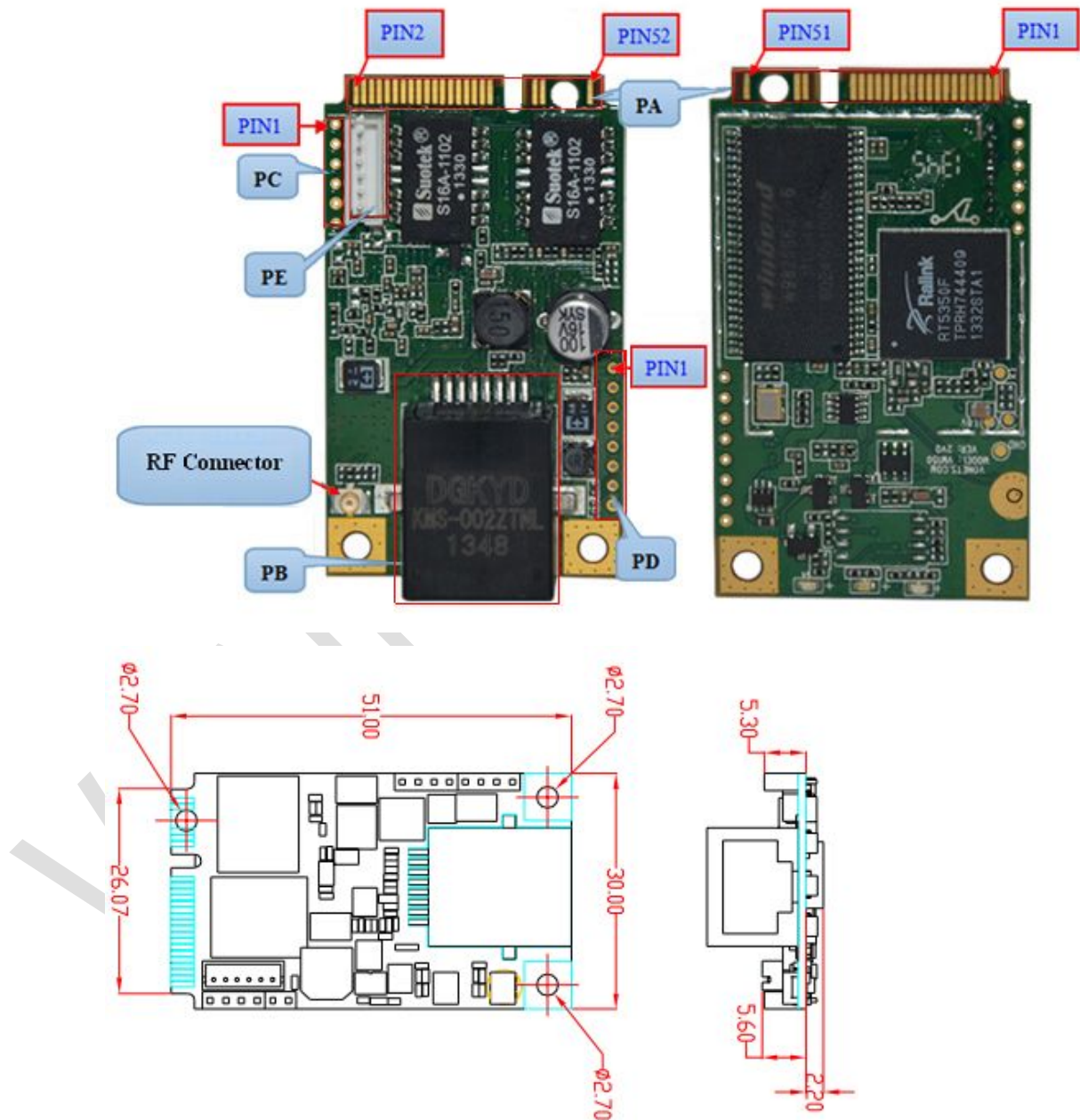


## VM150\_2V0 WiFi Module Specification

### 1. Features

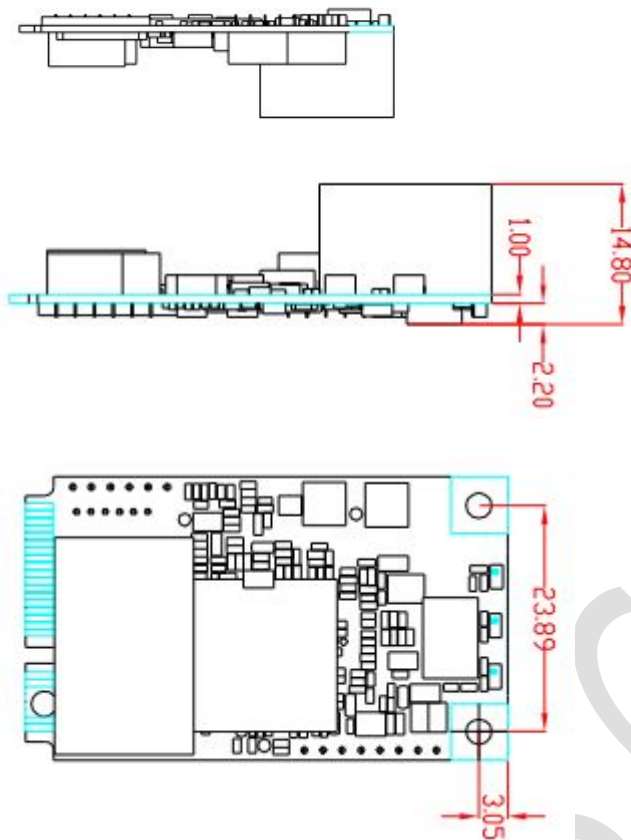
#### 1.1 Hardware Features

- Module Outline:



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- Wide operating voltage, operating voltage of two: DC3.3V--3.4V  
DC4.5V--15V

Input Voltage	DC3.3V--3.4V	DC4.5V--15V
The main chip Operating Voltage	After MOS transistor in series and input voltage, power supply to the main chip, MOS tube drop to around 0.03V.	Input voltage, converted by a professional power chip for DC / DC, supply power to the main chip.
Power features	Such power need Input voltage stability, ripple, or this may lead to instability or WiFi module performance deterioration.	Such power supply has less stringent requirements on the input voltage and ripple, very wide input voltage values.
<b>According to difference of the input voltage, the both working voltage mode of Module will automatically switch</b>		

- Clocked of main chip: 360MHz.
- 32Mb SDRAM, can be extended 64Mb; 4Mb SPI Flash, can be extended 16Mb(Byte).

- WiFi working frequency:2.4GHz, 1T1R single antenna, 150Mbps transmission rate.
- Support 1-14WiFichannels.
- Rated Power< 3W.
- Output power of Module RF :13.5dbm--14.5dbm.
- Adopt the original creation D/A temperature compensated auto frequency control technology (TAFC) ,make sure the lasting stability to ensure that the WiFi signal is not dropped.
- Support 802.11b/g/n mode.
- Operating ambient temperature: -25℃ ---- 55℃

### 1.2 Features

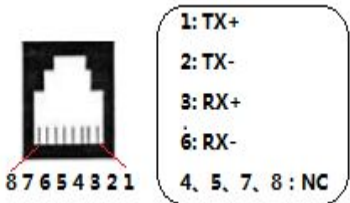
- Two software-controllable operating modes:routing mode,Bridge+Repeater mode.
- Support intelligent transparent bridge mode, also support AP Client and AP Station.
- Support 3G/4G Module
- Independent hardware data processing, does not consume host system resources, without installing any drivers
- In bridge mode, fool configuration to facilitate the secondary development implanted into other host systems.
- Built-in WEB configuration services, available configure module parameters through the web.
- Built-in SOCKET monitoring services, used to control two GPIO (1.5A) output, nine kinds of GPIO control state to facilitate the secondary development and function expansion.
- Support VDNS technology, in bridge mode, can be configured via logging on the domain login page, solve the problem that configure and secondary development.
- Two external antenna RF Female.
- Support for online firmware upgrade.
- Support open-wrt.
- The main function the interface:

Female- interface	MINI PCIE ( PA )	6PIN Female ( PE )	6PIN Pin Interface ( PC )	8PIN Pin Interface ( PD )	RJ45 Female ( PB )	Directions
Sub-interface						

2. Hard ware	VIN+	√	√	√		DC3.3V--3.4V DC5V--15V	
	WAN	√				√	Software-controlled
	LAN	√	√	√			interchangeable
	WAN Status Indication	√				√	1.MOS transistor open collector output, built-in 330Ω current limiting resistor 2.Output Current: 10mA
	WiFi Bridge connection status indication	√				√	1.MOS transistor open collector output, built-in 330Ω current limiting resistor 2.Output Current:10mA
	Reset signal input	√				√	Restore factory parameter
	GPIO_01 output	√				√	1. MOS transistor open collector output 2.Limit voltage: 15V
	GPIO_02 output	√				√	3.Output Current: 1.5A 4.Software control 9 kinds of controllable state
USB Host					√	3G/4G USB data card interface, USB_5V need external supply	

### interface details

Female-interface Sub-interface	Interface pin definitions(PIN)				Directions
	PA	PC、PE	PB	PD	
VIN+	2、24、39	6			DC3.3V--3.4V DC5V--15V
GND	4、9、15、18、 21、26、27、 34、35	5		8	Module Place

WAN	13: TX+ 16: TX- 17: RX+ 19: RX-		Standard RJ45 Ethernet port female		<b>PB'</b> s WAN pin parallel with the <b>PA'</b> s WAN	Configure through the Web, WAN or LAN can be exchanged
LAN	11: RX- 7: RX+ 5: TX- 3: TX+	1: RX- 2: RX+ 3: TX- 4: TX+			<b>PC</b> and <b>PE'</b> s LAN pin parallel to <b>PA'</b> s LAN	
WAN Status Indication	25			2	1.MOS transistor open collector output, built-in 330Ω current limiting resistor 2.Output Current: 10mA	
AP Client connection Status Indication	23			1	1.MOS transistor open collector output, built-in 330Ω current limiting resistor 2.Output Current:10mA	
Reset signal input	32			5	After Module work properly, remain low at least 3 seconds, the module will restore the factory parameters	
GPIO_01 output	28			3	1.MOS transistor open collector output	
GPIO_02 output	30			4	2.Limit voltage: 15V 3.Output Current: 1.5A 4.Software Control, 9 kinds of controllable status	
USB Host				6: USB_D- 7: USB_D+	1.3G/4G USB Dongle Card Interface 2.USB_5V external power supply required	
Standard RJ45 female pin definitions reference						

### 3. Software control (secondary development SDK)

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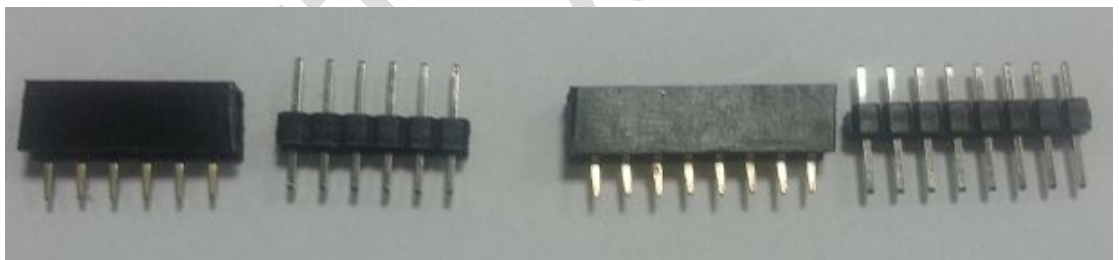
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#### 4. Supplied accessories

- 2dbm external antenna with RF cable ties



- 6PIN and 8PIN pin male and female



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