#### **Overview**



MHD OBD2 Wifi Flasher was specially developed and designed to operate the Ethernet OBD2 diagnostic and coding features via wired J2534 port and wireless via an embedded module based on the universal serial interface network standard, built-in TCP / IP protocol stack, enabling the user serial port, Ethernet, wireless network (wifi) interface between the conversions. traditional serial devices do not demand to change any configuration, data can be transmitted through the Internet

network. Provide a quick solution for the user's serial devices to transfer data via Ethernet

#### **Features**

- 2.4GHz 802.11b/g/n,compatible
- Support IEEE 802.3 \ IEEE 802.3u
- WiFi Client/AP/Router Mode
- Support wps/wds
- The range of baudrate: 1200~500000bps
- Support transparent transmission mode
- Support multiple security authenti-cation mechanisms: WEP64/WEP128/ TKIP/ AES WEP/WPA-PSK/WPA2-PSK
- Support wireless roam
- Support multiple network protocols: PPPOE/TCP/UDP/DDDNS /DHCP/DNS/HTTP/Firewre
- Support AT+ instruction set
- Support two config methods:Serial/WEB
- Device Dimensions 87\*47\*26mm



# **Applications**

Ethernet OBDII WiFi Diagnose

## **Specifications**

The parameters are defined here.

Typical DC Chi	Notes	
Only will current	340mA	Wifi to serial AP mode or Client mode
One rj45 current	120mA	Serial to RJ45.
Two ri45 courent	135mA	One is Wan anther is LAN
WiFi and two g45	160mA	Default Mode/Factory Mode
Centre frequency accuracy	+)-25ppm	Additional +/-15ppm allowance
Typical RF Characteristics		Notes
Receive sensitivity	-70d8m	Use ligview to adjust
Maximum Transmit power	18dBm/15dBm/13.5dBm	802.11b/g/n
RF Port impedance – lpex onnector	50 ohm	2.4 - 2.5GHz
VSWR (max)	2:1	2.4 - 2.5GHz
Centre frequency accuracy	+/-25ppm	Additional +/-15ppm allowance
Periphe	Notes	
UART	2pins	1200-500kbps
RJ45(WAN)	4pins	Support pppox
R/45(LAN)	4pins	Support dhicp
3.3V Out	1pins	Support atmost 300mA/3.3V
1.8V Out	1gins	Support atmost 300mA/1.8V

# Wi-Fi Module Pin Assignment

Pin No	Signal Type	Description	
1	VCC5V	Supply Voltage, 5V+J-10%	
2	GND	Analogue Ground	
3	WIFILED	WLAN Activity LED	
4	V03.3	3:3V Output (Suuport Almost 300mA)	
5	LINK1	10/100 PHY Port #1 activity LED	
6	N/A	Reserved	
7.	N/A	Reserved	
6	GP100	General GPtO Reserved	
0	GPI01	General GPIO Reserved	
10	ES/RST	Exit transparent transmission mode/Restore factory value	
11	TXOP1	10/100 PHY Port #1 TXP	
12	TXONI	10/100 PHY Port #1 TXN	
13	RX1P2	10/100 PHY Port #2 TXP	
14	RXIN2	10/100 PHY Port #2 TXN	
15	RXDVI	10/100 PHY Port #1 RXN	
10.	KXIPI	10/100 PHY Port #1 RXP	
17	TXON2	10/100 PHY Port #2 OXN	
18	TNOP2	10/100 PHY Port #2 OXP	
19	GP102	General GPIO Reserved	
20	UART_RX	UART RXD.	
21	UART_TX	UART TXD.	
22	GP103	General GPIO Reserved	
23	LINK2	10/100 PHY Port #2 activity LED	
24	GP104	General GPIO Reserved	
25	WPS/RST	WiFi Protected Setup /Restore factory value	
26	GPIO5	General GPID Reserved	
27	VOLS	1.8V Output (Susport Atmost 300mA)	
28	vccsv	Supply Voltage, 5V+/-10%	

### **Electrical Characteristics**

Parameter	Min	Max
Module supply voltage VCC	3.9V	5.5V
Module Voltage Output VO3.3	3.1V	3.5
Module Voltage Output VO1.8	1.65V	1.9
GPIÓ Voltage	3.1V	3.5V
Storage temperature	-40°C	95°C

### **Operation Guidelines to work with car OBDII**

Step 1: Ignition ON, plug the MHD OBDII wifi flasher to the OBD2 diagnostic port

Step 2: Search the Wifi ISID started with MHD\_XXXXX from laptop wifi and access with the password which sated at the back side of the module.



- Step 3: Successfully connected and operated as user demanded via OBD2 diagnostic port.
- Step 4: Administration panel setup for administrators only.



### **Appendix Disclaimers**

The contents of this document are subject to change without notice. Autosvs Technology reserves the right to make changes, without notice, in the products, including circuits and/or software, described or contained therein. Information contained in this document regarding device applications and the like is intended through suggestion only and may be superseded by updates. It is your responsibility to ensure that your application meets with your specifications.

Autosvs Technology warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with Autosvs Technology's standard warranty. Testing and other quality control techniques are used to the extent Autosvs Technology deems necessary to support this warranty. Except where mandatory by government requirements, testing of all parameters of each product is not necessarily performed.

Autosvs Technology assumes no responsibility or liability for the use of any of these products, conveys no license or title under any patent, copyright, or mask work right to these products, and makes no representations or warranties that these products are free from patent, copyright, or mask work infringement, unless otherwise specified.

Autosvs Technology products are not intended for use in life support systems, appliances or systems where malfunction of these products can reasonably be expected to result in personal injury, death or severe property or environmental damage. Autosvs Technology customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Autosvs Technology for any damages resulting from such use.

All products are sold subject to Autosvs Technology 's terms and conditions of sale supplied at the time of order acknowledgment. All trademarks are the property of their respective owners.

**NB Warning:** 

Manufacturer's Name: JR Auto Performance Inc. Sample Description: MG Flasher Enet Wifi

Trade Mark: /

Model number: MG Flasher Enet Wifi Operating Temperature: -10° C to 40° C

Wireless specification:

2.4G WIFI: Max power 14.38dbm in frequency band 2412-2462MHz

This product is a fixed location. To comply with RF exposure requirements, a minimum separation distance of 20cm must be maintained between the user's body and the device, including the antenna. The device complies with RF specifications when the device used at 20cm from your body. Use only the supplied or an approved antenna.

This device in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. All essential radio test suites have been carried out.

#### FCC Warning:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance

could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

FCC ID: 2AWSB-MGENET