

## WIFI Module IEEE 802.11a/b/g/n 2T/2R

**Model Number:** WAE22-DF01-AR

### Product Description

WAE22-DF01-AR is a high-gain and low power consumption wifi module . It fully complies with IEEE 802.11a、IEEE 802.11n and IEEE 802.11b/g feature rich wireless connectivity at high standards, delivers reliable, cost-effective, throughput from an extended distance. The wifi module is connected to TV main board by USB extension. The main system embedded related to drive, It will be started the Internet and video transmission function through the TV menu options.

### Product Features

- ◆ Complies with IEEE 802.11g; 802.11b; 802.11n standard for 2.4GHz Wireless LAN.
- ◆ Complies with IEEE 802.11a standard for 5GHz Wireless LAN.
- ◆ TWO Transmit and TWO Receive path(2T2R)
- ◆ Supports Ad-Hoc/Infrastructure modes
- ◆ Works with all existing network nrastructure.
- ◆ Capable of up to 128-Bit WEP Encryption.
- ◆ Freedom to roam while staying connected.
- ◆ UP to 300 Mbps High-Speed Transfer Rate in 802.11n mode of operation.
- ◆ Operating Systems: Windows XP 32/64,2000,Windows 7,Vista 32/64, Linux,Macintosh
- ◆ Low power consumption.
- ◆ Easy to install and configure.

### Product Specification

Model	WAE22-DF01-AR
Product Name	WIFI module
Standard	802.11a/b/g/n
Interface	6pin Interface
Data Transfer Rate	1,2,5.5,6,11,12,18,22,24,30,36,48,54,60,90,120 and maximum of 300Mbps
Modulation Method	BPSK , QPSK , 16QAM ,64QAM with OFDM(802.11a) QPSK , BPSK , CCK(802.11b) QPSK , BPSK , 16QAM ,64QAM with OFDM (802.11g) BPSK , QPSK , 16QAM ,64QAM with OFDM(802.11n)
Frequency Band	802.11b/g/n(HT20) 2412 ~2462MHZ for FCC 802.11n(HT40) 2422~2452MHZ for FCC 802.11a 5.15 ~5.25GHZ;5.725~5.825GHZ for FCC
Transmit Power	< 18dBm
Operation Mode	Ad hoc, Infrastructure
Operation Range	Up to 300 meters in open space
OS Support	Windows XP 32/64,2000,Windows 7,Vista 32/64, Linux,Macintosh
Security	WEP, TKIP, AES, WPA, WPA2
Operating Voltage	5V±10%
Operating Temperature	-10 ~ 70°C ambient temperature
Storage Temperature	-55 ~ 125°C ambient temperature
Humidity	5 to 90 % maximum (non-condensing)



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## **FCC Statement**

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 assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## **FCC Radiation Exposure Statement**

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. ”

This equipment 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.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. Modular could be only used in mobile or fix device, and could not be used in any portable device. The module must be installed in TV set.

In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

## **Caution!**

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate

the equipment.

## Regulation information

- (1) This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.
- (2) This compliance to FCC radiation exposure limits for an uncontrolled environment, and minimum of 20cm separation between antenna and body.
- (3) This device is restricted to indoor use due to its operation in the 5.15 to 5.25GHz frequency range.
- (4) The end product must carry a label stating “Contains FCC ID: W8UWAE22” .

## Appendix:

The wifi module is connected to TV main board by USB extension(as below picture).The main system embedded related to drive,It will be started the Internet and video transmission function through the TV menu options.

