

1.2. Operational Description

The EUT is a Full HD Video Wireless Transmitter Module with a built-in 5GHz transceiver, together with Full HD Video Wireless Receiver Module. It has a SIMO design of two channel and one slow rate output wireless channel, which generates an upstream channel for data content transmissions, the antenna are use two Chip (2TX, 1RX).

The data modulation is OFDM, using two antennas to support 2(Transmit) * 1(Receive) technology. The device only provided one transmitting speed 63Mbps in 40MHz bandwidth mode.

Presents the ultimate solution for converting any High Definition (HD) system, including Full HD, into a wireless one. These add-on modules enable wireless A/V applications that fit easily into the living room and eliminate traditional A/V wiring. The perfect HD video and audio quality and the high robustness are unmatched by any other wireless technology and present a true alternative to cable. The WHDI system transmits uncompressed video and audio streams wirelessly and thus simplifies and eliminates system issues, such as: lip-sync, large buffers and other burdens like retransmissions or error propagation.

The device can transmit audio and video signal to associate equipment, device will receive signal form associate equipment when associate equipment request change operation frequency.

The AMN2120 WHDI™ baseband transmitter chip is the heart of the RF31100M WHDI transmitter module. The AMN2120 includes an internal microcontroller for controlling the physical level.

The AMN2120 is based on MIMO technology transmitting through up to two output channels. Four digital-to-analog converters and one analog-to-digital converter are embedded within the chip.

The input frequency is multiplied and then used as an internal system clock.

The AMN3110 is a fully integrated direct conversion MIMO transmitter specifically designed for WHDI applications using OFDM modulation in single-band 4.9 GHz to 5.9 GHz. The device consists of:

- Two Complete Downlink Direct Conversion Transmitters.
- One Uplink Receiver.
- Integrated Synthesizer.
- Internal DC Servo Loops.
- RSSI.
- IQ Detector.
- RF and Baseband Control Interface.
- Power Management Unit.
- 3-Wire SPI Interface.

To complete the RF front-end solution, the AMN3110 uses external PA, RF switches, RF Band Pass Filter and Low Pass Filter, RF BALUNs and a few passive components.

This device is slave equipment, another information please refer to users manual.

Test Mode	Mode 1: Transmitter -40BW
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