VR300W Working Principle

VR300W is designed for shooting and monitoring backsight when the vehicle is reversing. It consists of 3 parts: a CMOS sensor, a 2.4GHZ of wireless transmission mode, Power Supply.

Part 1: CMOS Sensor

With brand of OmmVision, model of OV7910 and PAL format, the CMOS sensor features Automatic Gain Control (AGC) and Automatic White Balance. And it provided with lens of 135° wide-angle.

Array Size	PAL**:** 628 x 582 pixels
Image Area	PAL: 5.78 x 4.19 mm
Auto Electronic Exposure	1/60-1/15000 sec.
S/N Ratio	> 48 dB
Fixed Pattern Noise (FPN)	< 0.03% V**P-P**
Dark Current	< 0.2 nA/cm2
Dynamic Range	> 72 dB
Power Supply	5VDC, ±5%
Power Requirements	200 mW
Package Type	48-pin LCC

Part 2: 2.4GHZ Wireless Video Transmission Mode

Through a **2.4GHZ Wireless Video Transmission Mode**, the CMOS Sensor transfers video image signal (CVBS signal) that was shot to TFT display in a RF way. With a built-in 2.4GHZ receiver, the TFM monitor receives video signal. The 2.4GHZ receiver demodulates CVBS sychronous signal from received video signal and input the sychronous signal to the RGB driver IC (LV4137W). That's the image comes on the display. The 2.4GHZ wireless transmission mode can transmit signal to a location up to 15 meters away (in case of barriers existing).

Part 3: Power Supply

For the CAMERA, the SENSOR and transmitter draws 5V power which is decreased to from 12V through a DC-DC circuit.