Operational Description

The NC316 is a Network camera provides the ability to view the cameras monitored through PC or mobile phone as a live video stream, it supports the telecommunications standard of 3GPP streaming format. All 3G enabled mobile devices and most 2G phones that support the streaming standard of 3GPP are compatible.

The U11 is a CMOS image sensor, it captures the image data and the data is send to U1 on ITU656 format.

The U1 on ABIPCAMCORE1VA board is an ARM MCU including a MPEG4/H.264 CODEC, it implements all the control and TCP/IP protocol in the same time it will encode the image data come from U11.

While the encoding is complete, the encoding data will be sent out in two ways. While the RJ45 is pluged, NC316 will send the compress image data by the CAT5 wire. While the RJ45 is unplugging, NC316 will send the compress image data by the WLAN Module using Wireless way.

The U1 include a Ethernet MAC and PHY, the J15 include a transformer, so U1 sent compress image data to Ethernet by J15.

The camera allows live the MPEG-4 and H.264 streams simultaneously. The camera features MPEG4 compression which compresses the video to make transmission faster and more efficient. The MPEG4 and MJPEG image can be transmitted at 30 frames per second. Because of its high-compression ratios, users can monitor high-quality moving images with low delay even at low bandwidths. The image size can be selected according to the network environment and application requirements. Image size can be selected from three modes: 640 x 480, 320 x 240, and 160 x 120.