

Description:

DP268-A-OBU is a Two-Pieces On-Board Units (OBU) which radio frequency is 5.75GHz ~ 5.840GHz.

The DP268-A-OBU is consists of communication control-circuits and 5.8GHz ASK transmitter,5.8GHz ASK receiver,and a 3.6V/2400mAh lithium battery inside.

The STC12LE5428 MCU is used in the communication control-circuits,it process the coding and decoding of the TX/RX of baseband,HDLC protocol,write and read the SIM Card,and control the display of LCD.

The 5.8GHz ASK transmitter is based on a 3860MHz PLL, two divided-frequency the PLL can produce a 1930MHz signal,mixed with these two signals,upconversion,and then output the carrier frequency of 5.79GHz. The TX baseband is used the ASK modulation with the carrier frequency, after a PA,the Radio is transmit from TX Antenna.

The 5.8GHz ASK receiver is designed with a wave-detector,the check out signal of baseband is amplified by a low power and low speed amplifier,and then drive the power and the high speed amplifier on,after amplify and waveform condition,produce the RX Baseband signal.