



The HF/6M ColibriDDC receiver is based on modern principle of direct conversion analog signal to digital signal via high speed ADC. You can receive HF/6M signals, but with a converter you have possibility to receive signals from VHF/UHF and other higher frequencies.

The ColibriDDC is used with the own ExpertSDR2 software, which has all standard demodulators, can output IQ-stream to additional software and can work with additional software for HAMs and other applications.

**Features:**

- For direct conversion is used a high speed ADC 125 MHz 14 bit
- Two independent receivers with 312 kHz bandwidth in 0.09...55 MHz frequency range
- Oversampling receiving up to 800 MHz
- Wide bandscope with bandwidth up to 60 MHz
- High quality 24 bit audio codec on board
- 7 programmable switches with open collector for control external devices
- Interface to PC 100 Mb/s, supporting DHCP Server/Client or static IP address
- Low power supply voltage 5 V and current 0.7 A
- 10 MHz reference input
- Mute control for connecting to the classical transceiver
- Small size
- ExpertSDR2 software is free, works under OS Windows, Linux and MAC OS*

* The ExpertSDR2 software will work under MAC OS in the future releases of software

Applications:

- Receiver for monitoring a radio frequencies with two independent receivers
- Panoramic adapter for classical transceiver
- Remote station of reception - for contestmen and other
- Spectrum analyzer with wide bandwidth
- Receiving signals and IQ stream outputs for additional DSP software

ColibriDDC Specification

Receiver	
Modes	AM/SAM/NFM/WFM/LSB/USB/DSB/CW
Frequency Range	10 kHz - 55 MHz
Oversampling Frequency Range	10 kHz - 800 MHz
10 MHz reference input	present
LAN 100 Mbps protocols	UDP, DHCP Client/Server
Onboard High Quality Audio DAC	24 bit
Output IQ Sample Rate	39, 78, 156, 312 kHz
DSP unit (optional) for restrict digital stre	128 Kbps with 1 receiver channel
Wide bandscope	Up to 60 MHz
Independed receiver channels	2
Blocking Dynamic Range	110 dB
IMD3 Dynamic Range	90 dB
I/Q Image Rejection	>110 dB
ADC converter	125 Msps, 14 bit
Internal TCXO	20 MHz, +-0.5 ppm
Attenuators	0, -20 dB
Input filters	One 55MHz LPF
External Radio Control	7 programma transistor switches
Power supply	+5V, 0.7A
Dimensions	64x24x115



ColibriDDC Blok diagram

