YTTEK


# PluSDR™

## Software-Defined Radio Platform

## Unlock remarkable throughput and flexibility

### 400 MHz bandwidth, Up to 15 GHz frequency

The YTTEK PluSDR series is a powerful, flexible SDR platform that transforms wireless system development and verification. Covering frequencies up to 15 GHz, it uniquely supports both X-band and Ku-band transceivers in a single unit, as well as BT, Wi-Fi, 5G NR, and LEO/GEO communication. Offering up to 400 MHz of bandwidth for Wi-Fi 7 and 5G FR2, the PluSDR ensures seamless integration of cutting-edge communication technologies.

**Intuitive example codes for accelerating development**
With support for Python, MATLAB, and C++, the PluSDR includes extensive free example code for rapid prototyping- enabling easy configuration as an arbitrary waveform generator, a spectrum analyzer, or even a real-time wireless communication system.

**Support professional mmWave OTA testing**
Equipped with a unique DCI interface, the PluSDR seamlessly integrates with YTTEK's mmWave FEM for beamforming, beam steering, and beam management research—allowing system innovators to rapidly conduct mmWave over-the-air (OTA) tests.

**Applications**
Academy and R&D

**Key features**

- Covers frequencies from 10 MHz to 15 GHz
- Up to 400 MHz bandwidth
- Intuitive, free example code included
- Suitable for multiple wireless communication standards

## Specifications

| Model name | YTPC400 | YTPC100 | YTPC056 |
|---|---|---|---|
| Frequency Range | 10 MHz – 15 GHz | 300 MHz – 6 GHz | 70 MHz – 6 GHz |
| Max Bandwidth | 400 MHz per channel | 100 MHz per channel | 56 MHz per channel |
| Number of channels | Max. 2TX, 2RX | Max. 4TX, 4RX | Max. 4TX, 4RX |
| Scalability | N/A | Max. 4 units for 16TX, 16RX | Max. 4 units for 16TX, 16RX |
| RX Gain Range (dB) | 60 | 30 | 60 |
| RX Gain Step (dB) | 0.25 | 0.5 | 1 |
| RX Max. Input Power (dBm) | +10 | +4 | N/A |
| RX Sampling Frequency (MHz) | 31-800, 983.04 | 122.88 | 61.44 |
| TX Power Control Range (dB) | 60 | 40 | 40 |
| TX Power Control Resolution (dB) | 0.25 | 0.25 | 1 |
| TX Sampling Frequency (MHz) | 31-800, 983.04 | 122.88 | 61.44 |
| Software | Python, MATLAB, C/C++ | Python, MATLAB, C/C++ | Python, MATLAB, C/C++ |
| Synchronization | • REF IN (10MHz clock reference input)<br>• REF OUT (10MHz clock reference output)<br>• TRIG IN | • Clock reference with external clock and synchronous signal<br>• TRIG IN | • Clock reference with external clock and synchronous signal<br>• TRIG IN |
| Peripherals | • 3.5mm SMA female connectors<br>• 1 RJ45 (1 GbE)<br>• 1 Type B USB to JTAG | • 3.5mm SMA female connectors<br>• 1 RJ45 (1 GbE)<br>• 2 SFP+ ( 2 10GbE)<br>• 1 Type B USB to JTAG | • 3.5mm SMA female connectors<br>• 1 RJ45 (1 GbE)<br>• 2 SFP+ ( 2 10GbE)<br>• 1 Type B USB to JTAG |
| Power | 12V | 12V | 12V |
| Dimension (mm) | 315.5 x 366.2 x 75.5 | 327.9 x 318 x 69.4 | 327.9 x 318 x 69.4 |
| Suitable for Wireless Communication Standards | Wi-Fi 6, Wi-Fi 6E, Wi-Fi 7, 5G FR1, 5G FR2, 5G FR3, 3GPP NTN, CCSDS, DVB-S2, DVB-S2X | | |

Visit YTTEK

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