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 and versatile SDR platform designed to redefine wireless system development and verification. It accelerates communication system development while serving as a flexible and efficient verification tool. Additionally, it can function as a standalone end-product capable of directly executing tasks. With frequency coverage up to 15 GHz and bandwidth support up to 400 MHz, it is an ideal choice for high-performance SDR platform.

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.

Real-time satellite modem integration
YTTEK integrates a real-time modem function within PluSDR, supporting up to 400 MHz of bandwidth for satellite communications. This includes compatibility with CCSDS and DVB-S2 protocols, ensuring seamless integration of advanced communication technologies.

Applications
Academy and R&D

Key features

- 10 MHz-15 GHz frequency coverage for 6G FR3 and SatCom Ku-band

- Up to 400 MHz bandwidth

- Intuitive, free example code included

- Applicable to 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	0
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 Max Output Power (dBm) *Varied by Frequence	< +20	< +19	< +8
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) • REF OUT (10MHz clock reference output) • TRIG IN	• Clock reference with external clock and synchronous signal • TRIG IN	• Clock reference with external clock and synchronous signal • TRIG IN
Peripherals	• 3.5mm SMA female connectors • 1 RJ45 (1 GbE) • 1 Type B USB to JTAG	• 3.5mm SMA female connectors • 1 RJ45 (1 GbE) • 2 SFP+ (2 10GbE) • 1 Type B USB to JTAG	• 3.5mm SMA female connectors • 1 RJ45 (1 GbE) • 2 SFP+ (2 10GbE) • 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