

RED PITAYA

STEM^{lab} 125-14 Edu Pack

■ Product description



STEMlab 125-14 Edu Pack is based on Red Pitaya's best-selling DAQ platform and with the chosen accessories a perfect fit for educational purposes.



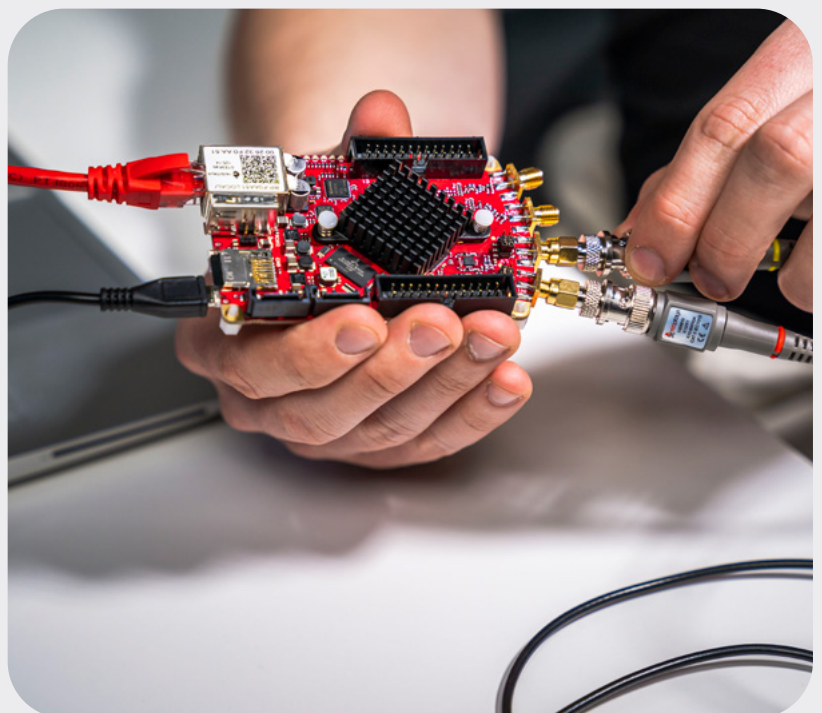
The kit offers a wide range of functionalities, including an oscilloscope, spectrum analyzer, signal generator, and more. With its high-performance capabilities, you can accurately measure and analyze signals with ease.

The device comes with solid performance due to 14bit 125Msps ADC and DAC & Xilinx Zynq 7010 FPGA, and offers the same benefits as other Red Pitaya products. The main benefits are remote accessibility, with a WEB app user interface accessible through Ethernet or Wi-Fi.



■ What is in the box

- Red Pitaya STEMlab 125-14 board
- SD card (16GB, class 10)
- Ethernet cable (1m)
- Power supply (5V, 2A)
- Sensor extension module
- Acrylic case
- 8ch Logic Analyzer probes
- Logic Analyzer cable
- 2x oscilloscope probes
- 2x SMA to BNC adapter
- 2x 50 ohm termination
- 2x SMA T adapter
- Wi-Fi dongle



■ Technical Specifications

BASIC

RAM	512MB (4Gb)
System memory	Micro SD up to 32GB

CONNECTIVITY

Ethernet	1 Gbit
USB	USB 2.0
WIFI	Using Wi-Fi dongle

RF INPUTS

RF input channels	2
Sample rate	125 MS/s
ADC resolution	14 bit
Input impedance	1M Ω
Full scale voltage range	± 1 V (LV) and ± 20 V (HV)
Input coupling	DC
Bandwidth	DC - 60 MHz

RF OUTPUTS

RF output channels	2
Sample rate	125 MS/s
DAC resolution	14 bit
Load impedance	50 Ω
Voltage range	± 1 V
Short circuit protection	Yes
Typical raising/falling time	2V / 10ns
Bandwidth	DC - 60MHz

EXTENSION CONNECTOR

Digital IOs	16
Analog inputs	4 channels 0-3.5V 12 bit
Analog outputs	4 channels 0-1.8V 12 bit
Communication interfaces	I2C, SPI, UART
Available voltages	- 4V, + 3.3V, + 5V

SYNCHRONIZATION

Trigger input	Through extension connector
Daisy chain connection	Over SATA connection
Ref. clock input	N/A