PTU-240

240W USB-C Power Test Unit for testing Extended Power Range (EPR) in USB Type-C ™ sinks and sources



USB-C EPR 240W Test Tool

The USB-C Power Test Unit 240W (PTU) is an accessory designed to expand the testing capabilities of the UTC-274 USB-C tester. PTU combines both programmable DC electronic load and power supply functionality in a single compact unit, seamlessly integrating with the UTC-274 to provide comprehensive USB-C power testing solutions.

Advanced PD Protocol Support

Supporting the latest USB Power Delivery 3.1 standards including both Standard Power Range (SPR) and Extended Power Range (EPR) protocols, the unit can function as either a PD source or sink with capabilities up to 48V/5A, delivering a maximum power output of 240W. This comprehensive protocol support ensures compatibility with the newest generation of high-power USB-C devices and enables thorough validation testing of power delivery negotiation, voltage/current profiles, and charging behaviors across the complete USB-C power spectrum.

Highlights

- Standalone test unit or accessory to Unigraf UTC-274
- Maximum power: 240W
- Voltage range: 5V ~ 48V
- Current range: 0.1A ~ 5A
- Dual functionality: Electronic Load + Power Supply
- USB PD3 / PD2 protocol support
- PD source and sink operation modes
- High precision voltage & current measurement
- Automated test sequence programming
- OVP , OCP and UVP protection

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USB-C Power Test Unit 240W

Automated Testing Integration

When paired with the UTC-274 tester, the USB-C Power Test Unit 240W becomes a powerful solution for automated production line testing through the high-level UTCLibrary API.

This seamless integration enables automated test sequences, test result logging, and pass/fail criteria validation, making it ideal for high-volume manufacturing environments. The comprehensive API provides full programmatic control over all unit functions, allowing test engineers to develop custom test routines, implement statistical process control, and integrate the system into existing automated test equipment (ATE) frameworks for enhanced productivity and consistency in USB-C power testing applications.

Mode	Power Source	Power Sink
Voltage	0~48V	
Current	0~5A	
Power	240W	
Resolution	50mV	50mV / 10mA
Accuracy	±3%	0.15% (V) / 0.15% (A)
Protection		
Over Power Protection	240W	
Over Voltage Protection	48V	
Over Current Protection	5A	
Over Temperature Protection	85°C	
General		
AC Input Operation Voltage Range	90~264Vac, 47~63Hz	
Input Resistance (Load Off)	200kΩ (Typical)	
Temperature Coefficient	50PPM/°C (Typical)	
Computer Interface	USB 2.0	
Software	Windows, Linux UTC Console application, UTC Library (Python API)	
Power Supply	AC 100-240Vac ~1.6A (Max) 50-60Hz	
Environmental	Operating temperature 0~40°C Storage temperature 0~50°C	
Dimensions (WxHxD)	235mm x 100mm x 320mm	
Weight	3.854 kg	
Warranty	12 months	
EMC & Safety	CE	

All specifications subject to change without notice.

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