TELEDYNE TEST TOOLS
Everywhereyoulook™

T3PS3000 Data Sheet

Programmable DC Power Supply

Power with Confidence

32 Volts – 3.2 Amps – 220 Watts





T3PS3000 Rear View

Tools for Improved Debugging

• 3 Independent isolated outputs – 32 V/ 3.2 A x 2, 2.5 V/ 3.3 V/ 5 V 3.2 A x 1, total 220 W.	✓ More application coverage from a single power supply.
• High Resolution, High Precision Output – 5 digits Voltage, 4 digits Current Display, Minimum Resolution: 1 mV/ 1 mA.	✓ Excellent setting and read back accuracy.
• 3 output modes: Series, Parallel and Independent.	✓ Combine two channels into one for greater power output flexibility.
• 4.3 inch (10.92 cm) color TFT-LCD 480 x 272 display.	✓ Clear and flexible display aids ease of use.
• Graphical display interface with waveform display function.	✓ View waveform shape and timing settings.
• Intelligent temperature controlled cooling fan.	✓ Quieter operation by reducing fan speed during low load usage.

Key Specifications

Independent Output Operation	0 V – 32 V, 3.2 A x 2, 2.5 V/ 3.3 V/ 5 V x 1, 3.2 A
Parallel Output Operation	0 V – 32 V, 6.4 A x 1, 2.5 V/ 3.3 V/ 5 V x 1, 3.2 A
Series Output Operation	0 V – 64 V, 3.2 A x 1, 2.5 V/ 3.3 V/ 5 V x 1, 3.2 A
Maximum Power	220 Watts
Connectivity	USB Device, LAN
Remote Control	SCPI, LabView Driver

PRODUCT OVERVIEW

Teledyne Test Tools new T3PS3000 is a Linear Programmable DC Power Supply with a 4.3 inch TFT LCD display. It has three isolated outputs: two adjustable channels and one selectable channel from 2.5 V, 3.3 V, and 5 V with output short and overload protection for each channel. Support for series and parallel operation of the two main channels extends its flexibility beyond the standard specification. The T3PS3000 features include programmability via USB or LAN, a graphical display of power waveforms, and the high resolution numeric display of voltage and current. Typical users are Education, Production, and Design and Development.

FUNCTIONS AND CHARACTERISTICS

High Resolution and High Precision Output

The highest resolution of 1 mV / 1 mA provides excellent setting and read back accuracy. This ensures accurate output even with very with small changes in voltage or current.



Series / parallel / independent output configurations

Teledyne Test Tools T3PS3000 supports series and parallel output configurations allowing the two main channels to be combined into one output with more power output capability, extending the application range. Alternatively each output can be used independently giving the T3PS3000 maximum configuration flexibility and the widest range of application support.



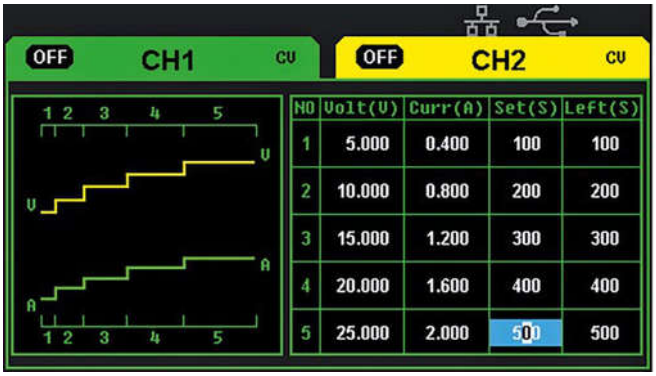
Series output mode



Parallel output mode

T3PS3000 displays output waveforms and data tables

Through front panel operation, 5 groups of timing settings and output control settings can be displayed on the built in color TFT LCD display, which provides users a simple power programming function and visual indication of output waveform shape. Further control is available via USB or LAN connection to a PC, providing a full range of communication and control capability.





SPECIFICATIONS

T3PS3000

Channel		CH1 output voltage: 0 ~ 32 V, output current: 0 ~ 3.2 A
		CH2 output voltage: 0 ~ 32 V, output current: 0 ~ 3.2 A
		CH3 output voltage: 2.5 / 3.3 / 5.0 V, output current: 3.2 A
Display		4.3 inch color TFT-LCD 5 digits voltage 4 digits current
Resolution		1 mV / 1 mA
Program Accuracy		Voltage ± (0.03 %of reading + 10 mV) Current ± (0.3 %of reading + 10 mA)
Readback Accuracy		Voltage ± (0.03 %of reading + 10 mV) Current Current ± (0.3 %of reading +10 mA)
Constant Voltage Mode	Line Regulation	≤ 0.01%+ 3 mV
	Load Regulation	≤ 0.01%+ 3 mV
	Ripple & Noise	≤ 1 mVrms (5 Hz ~ 1 MHz)
	Recovery Time	< 50 μs (50 %load change, minimum load 0.5 A)
Constant Current Mode	Line Regulation	≤ 0.2 %+ 3 mA
	Load Regulation	≤ 0.2 %+ 3 mA
	Ripple & Noise	≤ 3 mArms
Parallel Mode	Line Regulation	≤ 0.01%+ 3 mV
	Load Regulation	≤ 0.01%+ 3 mV
Series Mode	Line Regulation	≤ 0.01%+ 5 mV
	Load Regulation	≤ 300 mV
CH3	Output Voltage	(2.5 / 3.3 / 5 V) ± 8 %
	Line Regulation	≤ 0.01%+ 3 mV
	Load Regulation	≤ 0.01%+ 3 mV
	Ripple & Noise	≤ 1 mVrms (5 Hz ~ 1 MHz)
Locking Key		Yes
Memory Save / Recall		5 Sets
Max Output Power		220 W
Power Source		AC 100 V / 120 V / 220 V / 230 V ± 10% 50/60 Hz
Standard Configuration Interface		USB Device, LAN
Insulation		Case to Terminal ≥ 20 MΩ (DC 500 V) Case to AC line ≥ 30 MΩ (DC 500 V)
Environmental		Operating Temperature: 0 °C to +40 °C
		Storage Temperature: -10 °C to +70 °C
		Humidity: 5% to 90% relative humidity (non-condensing) up to +30 °C. Upper limit derates to 50% relative humidity (non-condensing) at +40 °C
		Operating Altitude: 2000 m (Max)
		Indoor Use only
		Pollution Degree 2 (per IEC61010-1:2010)
Dimension		225 (W) × 143 (H) × 278 (D) mm
Weight		≈ 8.0 kg
The T3PS3000 comes with a 3 year return to Teledyne LeCroy warranty		

Ordering information

Product Name	T3PS3000: 3 channels independent output, min resolution 1 mV / 1 mA, USB Device & LAN, 4.3 inch LCD display
Standard Accessories	USB Cable
	Quick Start
	Calibration Certificate
	Power cord
	Output Test Cord -2 Sets

ABOUT TELEDYNE TEST TOOLS

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Company Profile

Teledyne LeCroy is a leading provider of oscilloscopes, protocol analyzers and related test and measurement solutions that enable companies across a wide range of industries to design and test electronic devices of all types. Since our founding in 1964, we have focused on creating products that improve productivity by helping engineers resolve design issues faster and more effectively. Oscilloscopes are tools used by designers and engineers to measure and analyze complex electronic signals in order to develop high-performance systems and to validate electronic designs in order to improve time to market.

The Teledyne Test Tools brand extends the Teledyne LeCroy product portfolio with a comprehensive range of test equipment solutions. This new range of products delivers a broad range of quality test solutions that enable engineers to rapidly validate product and design and reduce time-to-market. Designers, engineers and educators rely on Teledyne Test Tools solutions to meet their most challenging needs for testing, education and electronics validation.

Location and Facilities

Headquartered in Chestnut Ridge, New York, Teledyne Test Tools and Teledyne LeCroy has sales, service and development subsidiaries in the US and throughout Europe and Asia. Teledyne Test Tools and Teledyne LeCroy products are employed across a wide variety of industries, including semiconductor, computer, consumer electronics, education, military/aerospace, automotive/industrial, and telecommunications.

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T3 stands for Teledyne Test Tools.

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