

# Power Supplies Data Sheet

## Single and Dual Output

### Broad Product Range

**Current: Up to 30 Amps**

**Voltage: Up to 60 Volts**

**Power: Up to 360 Watts**



### Tools for Improved Debugging

- 7 Models to choose from. ✓ More choice for better application coverage.
- Single and Dual output models. ✓ Triple and Quad output models available in our Triple and Quad output model brochure.
- Programmable and non-programmable models available. ✓ Selection of bench or programmable / ATE instruments.
- Sense terminals on all single output models. ✓ Ensure the full voltage gets to your DUT. Sense compensates for wiring loss.
- Twin output models support independent, series and parallel output modes. ✓ Twin output models support the maximum output configuration flexibility.

### Models and Characteristics

|            |                 |               |       |              |
|------------|-----------------|---------------|-------|--------------|
| T3PS11230  | 0-12 V          | 0-30 A        | 360 W |              |
| T3PS12415  | 0-24 V          | 0-15 A        | 360 W |              |
| T3PS13206  | 0-32 V          | 0-6 A         | 192 W |              |
| T3PS13206P | 0-32 V          | 0-6 A         | 192 W | Programmable |
| T3PS16006  | 0-60 V          | 0-6 A         | 360 W |              |
| T3PS23203  | 0-32 V / 0-32 V | 0-3 A / 0-3 A | 192 W |              |
| T3PS23203P | 0-32 V / 0-32 V | 0-3 A / 0-3 A | 192 W | Programmable |

# SPECIFICATIONS

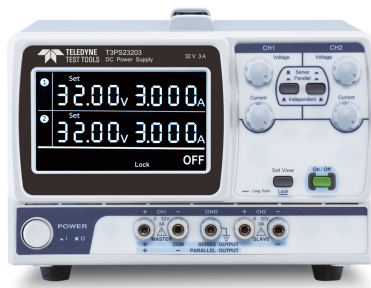
## Models and Specifications

|                                                        | T3PS11230                      | T3PS12415                      | T3PS13206                    | T3PS13206P                          | T3PS16006                      | T3PS23203                    | T3PS23203P                          |
|--------------------------------------------------------|--------------------------------|--------------------------------|------------------------------|-------------------------------------|--------------------------------|------------------------------|-------------------------------------|
| Number of Channels                                     | 1                              | 1                              | 1                            | 1                                   | 1                              | 2                            | 2                                   |
| Voltage Range                                          | 0-12 V                         | 0-24 V                         | 0-32 V                       | 0-32 V                              | 0-60 V                         | 0-32 V / 0-32 V              | 0-32 V / 0-32 V                     |
| Current Range                                          | 0-30 A                         | 0-15 A                         | 0-6 A                        | 0-6 A                               | 0-6 A                          | 0-3 A / 0-3 A                | 0-3 A / 0-3 A                       |
| Maximum Power                                          | 360 W                          | 360 W                          | 192 W                        | 192 W                               | 360 W                          | 192 W                        | 192 W                               |
| <b>Constant Voltage</b>                                |                                |                                |                              |                                     |                                |                              |                                     |
| Line Regulation                                        | ≤ 5 mV                         | ≤ 5 mV                         | ≤ 0.01%+3 mV                 | ≤ 0.01%+3 mV                        | ≤ 5 mV                         | ≤ 0.01%+3 mV                 | ≤ 0.01%+3 mV                        |
| Load Regulation                                        | ≤ 5 mV                         | ≤ 5 mV                         | ≤ 0.02%+5 mV                 | ≤ 0.02%+5 mV                        | ≤ 5 mV                         | ≤ 0.01%+3 mV                 | ≤ 0.01%+3 mV                        |
| Ripple & Noise                                         | ≤ 5 mV rms<br>(20 Hz - 20 MHz) | ≤ 5 mV rms<br>(20 Hz - 20 MHz) | ≤ 1 mV rms<br>(5 Hz - 1 MHz) | ≤ 500 $\mu$ V rms<br>(5 Hz - 1 MHz) | ≤ 5 mV rms<br>(20 Hz - 20 MHz) | ≤ 1 mV rms<br>(5 Hz - 1 MHz) | ≤ 350 $\mu$ V rms<br>(5 Hz - 1 MHz) |
| Recovery Time<br>(50% Load Change, minimum load 0.5 A) | ≤ 500 $\mu$ s                  | ≤ 500 $\mu$ s                  | ≤ 100 $\mu$ s                | ≤ 50 $\mu$ s                        | ≤ 500 $\mu$ s                  | ≤ 100 $\mu$ s                | ≤ 50 $\mu$ s                        |
| <b>Constant Current</b>                                |                                |                                |                              |                                     |                                |                              |                                     |
| Line Regulation                                        | ≤ 3 mA                         | ≤ 3 mA                         | ≤ 0.2%+3 mA                  | ≤ 0.2%+3 mA                         | ≤ 3 mA                         | ≤ 0.2%+3 mA                  | ≤ 0.2%+3 mA                         |
| Load Regulation                                        | ≤ 3 mA                         | ≤ 3 mA                         | ≤ 0.2%+3 mA                  | ≤ 0.2%+3 mA                         | ≤ 3 mA                         | ≤ 0.2%+3 mA                  | ≤ 0.2%+3 mA                         |
| Ripple & Noise                                         | ≤ 30 mA rms                    | ≤ 10 mA rms                    | ≤ 3 mA rms                   | ≤ 4mA rms                           | ≤ 3 mA rms                     | ≤ 3 mA rms                   | ≤ 2 mA rms                          |
| <b>Other</b>                                           |                                |                                |                              |                                     |                                |                              |                                     |
| Tracking Operation                                     | No                             | No                             | No                           | No                                  | No                             | Yes                          | Yes                                 |
| Remote Sense Terminals                                 | Yes                            | Yes                            | Yes                          | Yes                                 | Yes                            | No                           | No                                  |
| Programmable                                           | No                             | No                             | No                           | Yes                                 | No                             | No                           | Yes                                 |
| Technology                                             | Switching                      | Switching                      | Linear                       | Linear                              | Switching                      | Linear                       | Linear                              |
| Form Factor                                            | A                              | A                              | B                            | C                                   | A                              | B                            | C                                   |

## Form Factor



Form Factor style A offers a dual measurement display, high efficiency and high power density due to it's efficient switching design architecture.



Form Factor style B



Form Factor style C

Form Factor style B and C offer independent voltage and current readouts for both channels, high resolution read out, low noise, high reliability and compact size, along with 'Tracking Operation' on the dual channel models.

# PRODUCT OVERVIEW

The T3PS1XXXX and T3PS2XXXX Series are a range of single and dual output power supplies offering a range of voltage and current levels up to 360 Watts.

The dual output models offer 'Tracking Operation' whereby the two outputs can function independently of one another, or in parallel or series mode. In independent mode the two outputs function completely independently of one another, as two separate outputs. In parallel mode the two outputs act as a single output giving the standard output voltage range but with the two output current values added together giving twice the output current. In series mode the two outputs again act as a single output but now outputting twice the voltage allowing higher voltages to be reached at the normal current level.

The 'Remote Sense Terminals' allow the power supply to sense the voltage at the DUT and compensate for any voltage lost in the connecting cables thereby delivering the set voltage directly to the DUT and not simply at the power supply output terminals.

## Ordering Information

### Models

|            |                 |               |       |              |
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Each power supply comes complete with a power cord and connection leads.

Warranty: 3 Years return to Teledyne LeCroy.

# ABOUT TELEDYNE TEST TOOLS



## 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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World wide support contacts can be found at:  
<https://teledynelecroy.com/support/contact>

World wide instrument service can be found at:  
<https://teledynelecroy.com/support/service.aspx>

RoHS and WEEE information can be found at:  
<https://teledynelecroy.com/support/rohs.aspx>

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T3 stands for Teledyne Test Tools.

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