



AIM & THURLBY THANDAR INSTRUMENTS

New PL & New PL-P Series



New PL Series - advanced linear regulated laboratory power supplies

true analog controls with digital functionality

New PL-P Series - full remote control for bench & system applications

analog, RS-232, USB, LAN (LXI) or GPIB interfaces

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Aim-TTi

New PL Series

Analog control for a digital world

Building on the success of a winning formula

In the 1980s the original PL series transformed customer expectations of the bench power supply and set a format that has been extensively copied by other manufacturers.

Over the years, the PL series has been steadily revised and extended. Hundreds of thousands of PL series units are currently in use across the world and it remains the laboratory power supply of choice for many organisations.



TTi has been at the forefront of laboratory power supply design for around thirty years during which it has re-defined the state-of-the-art for switch mode products with its innovative Mixed-mode and PowerFlex regulator designs.

Continuing development of linear models has generated the lower cost EL series, and the advanced QL series. However, demand for the PL series has remained strong - demonstrating how well it has met the needs of its many customers.

Now TTI has engineered an all-new design which retains all the key features of the original PL series, but combines them with new and important features.

Analog controls with digital stability

As technology has changed, many products have moved from analog controls to digital ones. Although digital controls suit many instruments, they do not necessarily suit a bench power supply.

Customer research shows that many users prefer the speed and simplicity of conventional analog controls for setting voltage and current. Digital controls may offer greater precision, but often at the expense of ease-of-use.

With this in mind, the New PL series has retained the true analog controls of its predecessor.

The main disadvantage of analog controls is stability and security. The settings of analog potentiometers can drift over time. More importantly, the settings can be changed accidentally with potentially serious consequences.

The New PL series introduces **S-Lock**. One press of the Lock button transfers control of voltage and current from the analog controls to internal digital circuitry.

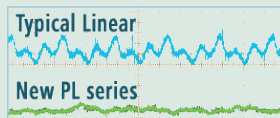
This offers not just complete security, but exceptional stability as well with each setting controlled by an instrumentation quality DAC.

Linear regulation for ultra-low noise

Linear regulation still offers the lowest output noise and the best transient response (recovery time from a sudden current step).

Most linear regulated power supplies offer low output noise with figures below 2mV rms being typical.

The New PL series goes a stage further and an rms noise figure of 0.4mV with tightly specified pk-pk noise and common-mode current figures.



Lock your settings at the touch of a button!



Choose a voltage range that suits your task

When working with any particular piece of equipment, engineers often require a voltage source variable over only a narrow range. Set the voltage too high and damage might occur, set it too low and the circuit may reset.

That's where the **V-Span** function of the New PL series comes in. It allows the user to redefine the end-stop values of the voltage control to define a specific voltage range.



For example:

An engineer is working on a circuit that will eventually operate from four NiMh cells.

They use V-Span to set a Vmax of 5.8 volts (to prevent over-voltage damage) and a Vmin of 3.6 volts (to ensure that the circuit doesn't reset).

They now have a power supply which provides high resolution analog control over the exact voltage range they need.

Vmin and Vmax can be set anywhere between zero and maximum output voltage subject only to $V_{max} \geq (V_{min} + 0.1V)$. The fine control gives additional adjustment of $\pm 1\%$.

Once set, the voltage span function can be turned on or off at the press of a button*.



New PL series - ultra compact using minimum bench or rack space

Ultra-compact design with higher power efficiency and near-silent cooling

The New PL series achieves an exceptional power density for a linear regulated power supply by offering up to 90 watts from a ¼ rack 3U sized casing.

This gives it an unusually small bench footprint taking up less space on a crowded bench.

For rack-mount application, up to four units can be mounted into a single slot.

Despite its small size and linear regulation, the New PL series generates relatively little heat through the use of an advanced phase controlled pre-regulator.

This gives it significantly higher energy efficiency than conventional linear regulated designs, particularly when supplying lower voltages.

The internal heat-sinks use fan-assisted convection cooling in order to remove the heat with minimal fan noise.



Actual size

High accuracy four digit meters have a fixed resolution for consistent readings at-a-glance.

View and adjust setting limits at any time.

S-Lock digitally locks voltage and current settings at the touch of a button.

True analog controls make adjustment quick and simple.

V-Span enables the full 300° rotation of the voltage control to cover any voltage range.

Safety binding post terminals can accept fixed-shroud 4mm plugs** as well as normal plugs, bare wires, and fork connectors.



Low current range gives 0.1mA meter resolution and finer low current setting.

Meter averaging reduces the jitter from rapidly varying load currents.

DC output switch enables voltage and current to be set up before connecting the load.

Voltage sensing can be changed between local and remote at the flick of a switch.

Better performance

- ▶ **Linear regulation:** ultra-low output noise and fast transient recovery
- ▶ **High power density:** 90 watts per output from an ultra-compact case size
- ▶ **Higher precision:** exceptional line and load regulation; easy-switch remote sense
- ▶ **Better metering:** high accuracy four digit fixed-resolution meters; low current range; current meter averaging

.... with real ease of use

- ▶ **True analog controls:** quick and intuitive adjustment of voltage and current
- ▶ **With digital convenience:** unique S-Lock and V-Span functions (see opposite)
- ▶ **See exactly what's happening:** dc output switch - check your settings before applying them; 'view settings' button - check and adjust limits at any time
- ▶ **Safe and secure to use:** lockable voltage and current settings (using S-Lock); connect via safety binding-post terminals

QM models - PL303QMD (quad-mode dual), PL303QMT (quad-mode triple)

Compact Dimensions

The PL303QMD is a dual output power supply with the same high power density as the single output models - 180 watts from a half rack 3U sized casing (214mm x 131mm).

90% of actual size

Four Modes of Operation

The PL303QMD is more than just two PL303 single power supplies in one box. It has four modes of operation: Independent, Isolated Tracking, Isolated Ratio Tracking, and True Parallel.



Independent Mode: The two outputs are completely independent and electrically isolated from each other.

Isolated Tracking Mode: The two outputs remain electrically isolated, but the voltage control of the Master output sets an identical voltage on the Slave output.

Note: Isolated Tracking enables the user to create two rails of either polarity and to reference them to different grounds if necessary (e.g. digital ground and analog ground).

Isolated Ratio Tracking Mode: As normal tracking, but the Slave voltage can be set to any percentage of the Master voltage and retains that ratio as the Master voltage is varied.

True Parallel Mode: All of the power is channelled to the Master output which can then supply up to 6 amps.

Note: In Parallel mode the Master side becomes a single 180 watt power supply, with the current meter operating to 6 amps. The slave output is disabled and its displays are turned off.

Simultaneous Output Control

The Both On/Both Off buttons are in addition to the individual switches for each output, and allow both outputs to be turned on or off synchronously by a single button press.

Synchronous switching of the outputs is of increasing importance for circuitry which can be damaged if one voltage rail is present without the other.

* Safety interlocks

A key requirement in a power supply is to prevent the wrong voltage or current being accidentally applied to the circuit-under-test. Consequently all operations that could result in an unexpected change in voltage or current settings have intelligent interlocks to prevent this.

** Safety terminals

The use of fixed-shroud 4mm plugs is becoming mandatory within an increasing number of laboratories for safety reasons. Standard binding post terminals can not accept these fixed-shroud plugs.



See final page for New QMT Triple

New PL-P Series Interfacing to every application



Bench and System use

The New PL-P series includes all of the manual control features of the New PL series, but adds comprehensive remote control facilities.

The ultra-compact rack-modular sizing makes it ideally suited to rack mounted system applications, while its user-friendly manual controls are retained for bench top applications.

Rear Power Terminals

Power and sense terminals are duplicated on the rear panel for rack mount applications or other situations where rear connection is more appropriate.

Digital Remote Control

To meet the varying needs of today's engineers, a comprehensive array of interfaces is provided. RS-232, USB and LAN (Ethernet) with LXI support are provided as standard. An additional GPIB interface is also optionally available.

Each of the digital bus interfaces provides full control of voltage, current, and output on/off, plus read-back of voltage, current and status. The interfaces are at ground potential and are opto-isolated from the output terminals.

RS-232

An RS-232/RS-423 interface is provided for use with legacy systems. This type of serial interface remains in common usage and is perfectly satisfactory for the control of power supplies because data speed is not an issue.

USB

USB provides a simple and convenient means of connection to a PC and is particularly appropriate for small system use. A USB driver is provided which supports Windows operating systems from Windows 2000 onwards.

LAN-Ethernet with LXI

The LAN interface uses a standard 10/100 base-T Ethernet hardware connection with ICMP and TCP/IP Protocol for connection to a Local Area Network or direct connection to a single PC. This interface supports LXI and is the most appropriate for larger system use because of its scalable nature.

LXI Compliance

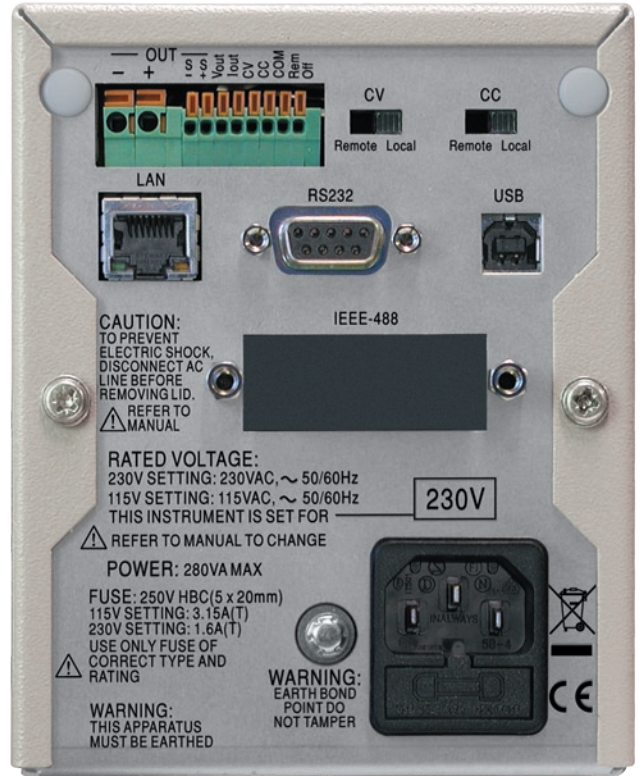
The LAN interface is compliant with LXI-C. LXI (LAN eXtensions for Instrumentation) is the next-generation, LAN-based modular architecture standard for automated test systems managed by the LXI Consortium, and is expected to become the successor to GPIB in many systems. For more information on LXI and how it replaces GPIB, or operates along side it, go to: www.tti-test.com/go/lxi

IVI Driver

An IVI driver for Windows is included. This provides support for common high-level applications such as LabView*, LabWindows*, and HP/Agilent VEE*.

GPIB (option G)

Further versions of the products which are fitted with a GPIB (IEEE-488) interface in addition to USB, RS232 and LAN.



New PL-P Additional Facilities

From the front, New PL-P models are identical to standard New PL models and retain all of their manual control features. On the dual and triple output versions, a single digital interface controls all outputs.

The rear panel carries RS-232, USB and LAN (Ethernet) connectors, together with analog in and out, remote on/off control*, and duplicate output and sense terminals. All models can be additionally fitted with a GPIB interface (option G - factory fit only).

* Note: analog in/out and remote on/off are not fitted to multi-output versions.

Analog Remote Control

Single output PL-P units include analog voltage control of voltage and current (non-isolated). Analog control outputs are also incorporated to enable easy parallel connection of multiple units in a master-slave configuration.

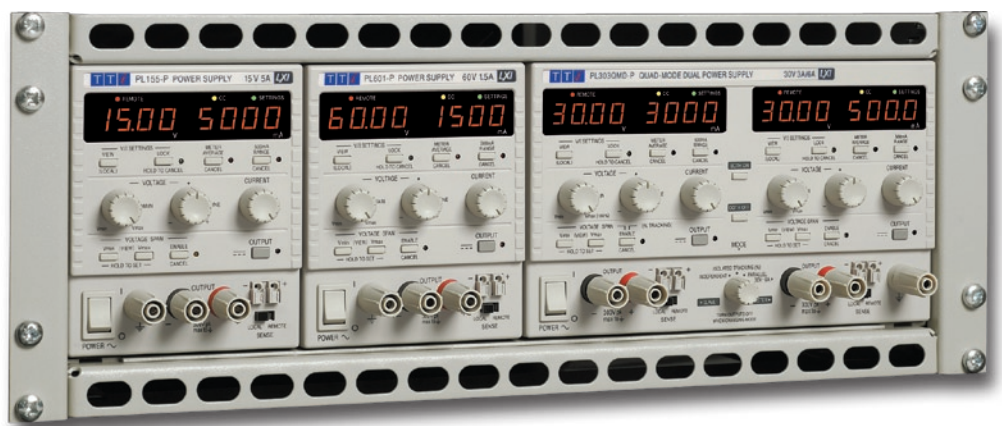
Terminals for remote on/off control are also provided.

Rack Mounting

Up to four single output units can be fitted into one rack width.

Alternatively, any combination of singles and duals can be used - as in the example shown.

The TTI RM450 rack mount (shown) is 4U high and incorporates limited ventilation space above and below the power supplies. Blanking plates are provided for unused positions.



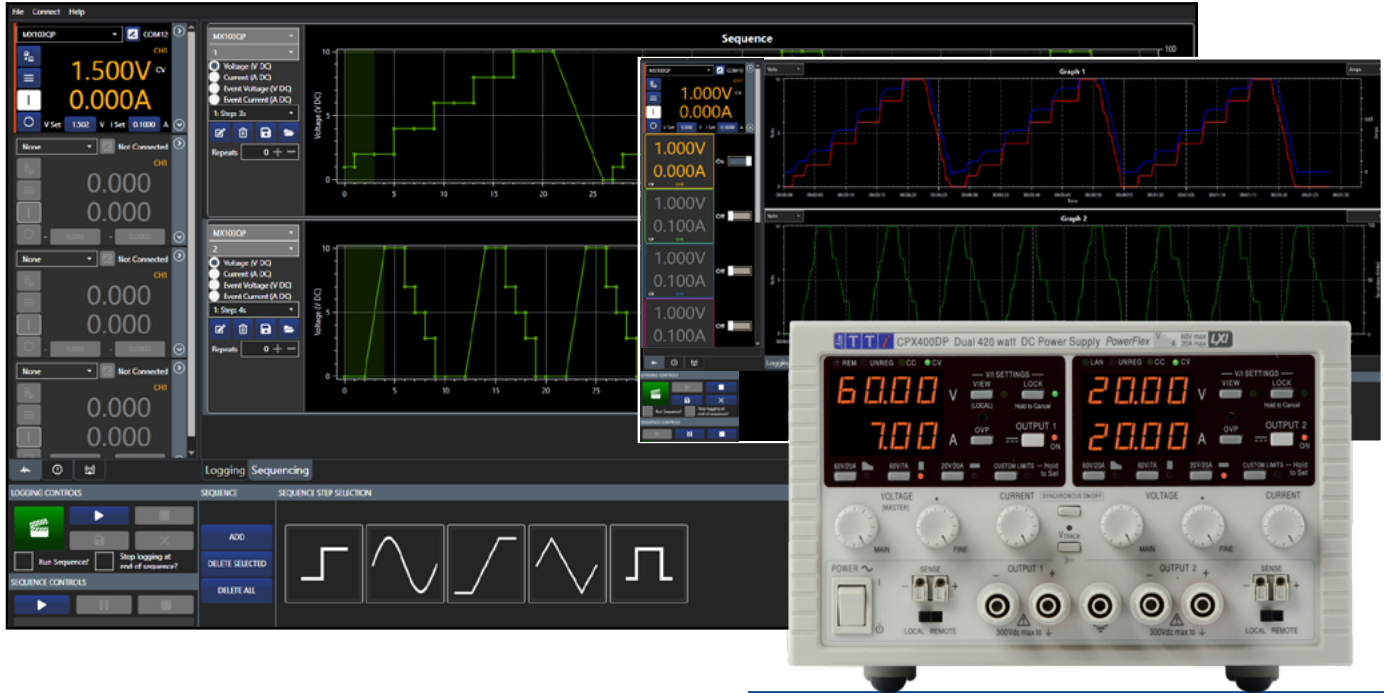


TEST BRIDGE SOFTWARE



Compatible with most Aim-TTi test and measurement instruments, see www.aimtti.com more details.

- ▶ MULTI INSTRUMENT CONTROL
- ▶ LOGGING TO TABLE, GRAPH AND HISTOGRAM FORMAT
- ▶ SINGLE POINT LOGGING WITH PASS/FAIL LIMITS
- ▶ TIMED SEQUENCE CONTROL ACROSS ALL INSTRUMENTS AND CHANNELS
- ▶ INTERACTIVE REMOTE COMMANDS WITH DESCRIPTIONS
- ▶ USB, LAN AND RS232 COMPATIBLE

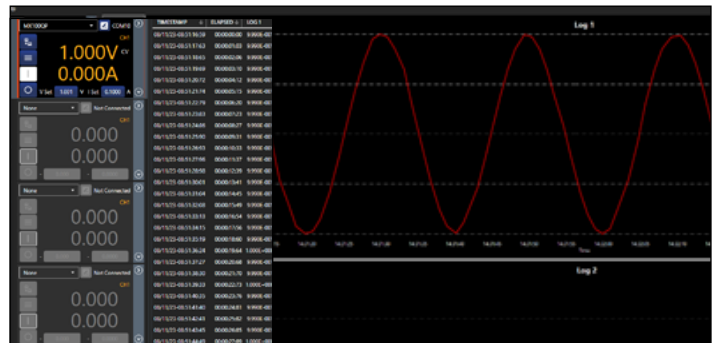


MULTI INSTRUMENT CONTROL

Up to four instruments can be connected at one time, each one can be controlled by the instrument panel; settings and limits can be viewed and amended in the settings menu. Live and set data can be displayed for all channels on a multiple channel instrument, each one colour coded for ease of identification.

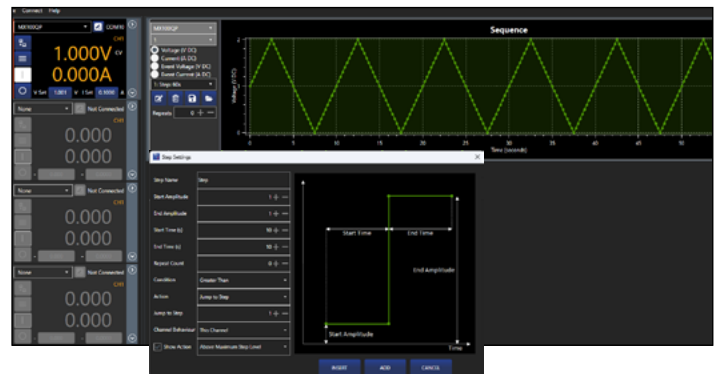
LOGGING TO TABLE AND GRAPH

Logging channels capture live data, they can be set to record values from any input/output* on an active instrument at specified time intervals. Varying measurement intervals can be set alongside units and plot line colour. User defined limits can be added to pass or fail the recorded data. Data can be displayed as time, point or histogram graphs. Logging on demand can be used to log single points as required. The results are plotted on one of the two available graphs and can also be viewed in a table. The graph provides advanced zooming and panning functions, allowing efficient data analysis. The data can be exported to a file.



TIMED SEQUENCE CONTROL

Each sequence is allocated to a specified channel on an instrument. Two different instruments can be added to each sequence, along with two events. Events can be set to: jump to another step in a sequence, stop the sequence, turn off individual channels, turn off all channels in an instrument, or turn off all channels for all instruments. A range of built in step options are available including: step, sine, ramp, triangle and square.



Test Bridge software can be downloaded from: <https://www.aimtti.com/support>.

* Instrument dependant

New PL & PL-P series - Technical Specifications

OUTPUTS

Voltage/Current Ranges:	0V to 6V/1mA to 8000mA; 0V to 6V/0.1mA to 800mA
PL 068	0V to 15V/1mA to 5000mA; 0V to 15V/0.1mA to 500mA
PL 155	0V to 30V/1mA to 3000mA; 0V to 30V/0.1mA to 500mA
PL 303	0V to 60V/1mA to 1500mA; 0V to 60V/0.1mA to 500mA
PL 601	0V to 30V/1mA to 3000mA; 0V to 30V/0.1mA to 500mA
PL303QMD & PL303QMT	(each 30V output); 0V to 30V/2mA to 6000mA; 0V to 30V/0.2mA to 1000mA (parallel mode). 0V to 6V/1mA to 8000mA; 0V to 6V/0.1mA to 800mA (PL303QMT O/P3)

Note: In manual operation, actual maxima for voltage and current are typically 1% greater than the figures given above.

Voltage Setting:	By coarse and fine controls.																																																						
Current Setting:	By single logarithmic control.																																																						
Configuration Selection: (PL303QMD & QMT only)	Independent, True parallel, Isolated Tracking & Isolated Ratio Tracking modes via front panel rotary switch.																																																						
Voltage Span Control (V-Span)	The voltage adjustment range can be controlled by digital setting of the end-stop values of the coarse voltage control to any desired values. The range for Vmax is 0.1V to 6V/15V/30V/60V depending on model. The range for Vmin is 0 to (Vmax - 0.1V).																																																						
Settings Lock (S-Lock)	Voltage and current settings can be locked by a single button press. Lock accuracy is equal to meter accuracy (see Meter Specification)																																																						
Output Mode:	Constant voltage or constant current with automatic cross-over. CC indicator lit in constant current mode.																																																						
Output Switch:	Electronic, non-isolating. Preset voltage and current limit displayed when Output is off.																																																						
Output Terminals:	Universal 4mm safety binding posts on 19mm (0.75") spacing for Output; screwless terminals for Sense.																																																						
Transient Response: Voltage Programming Speed (PL-P models):	<50µs to within 50mV of set level for a 5% to 95% load change. Maximum time required for output to settle within 1% of its total excursion (for resistive load). Excludes command processing time.																																																						
	<table> <thead> <tr> <th></th> <th>Full Load</th> <th>No Load</th> <th></th> <th>Full Load</th> <th>No Load</th> </tr> </thead> <tbody> <tr> <td>6V 8A</td> <td>Up 20ms</td> <td>10ms</td> <td>Down</td> <td>10ms</td> <td>115ms</td> </tr> <tr> <td>6V 800mA</td> <td>Up 20ms</td> <td>10ms</td> <td>Down</td> <td>30ms</td> <td>115ms</td> </tr> <tr> <td>15V 5A</td> <td>Up 45ms</td> <td>40ms</td> <td>Down</td> <td>10ms</td> <td>100ms</td> </tr> <tr> <td>15V 500mA</td> <td>Up 45ms</td> <td>40ms</td> <td>Down</td> <td>60ms</td> <td>100ms</td> </tr> <tr> <td>30V 3A</td> <td>Up 45ms</td> <td>40ms</td> <td>Down</td> <td>20ms</td> <td>150ms</td> </tr> <tr> <td>30V 500mA</td> <td>Up 45ms</td> <td>40ms</td> <td>Down</td> <td>50ms</td> <td>150ms</td> </tr> <tr> <td>60V 1.5A</td> <td>Up 45ms</td> <td>40ms</td> <td>Down</td> <td>50ms</td> <td>300ms</td> </tr> <tr> <td>60V 500mA</td> <td>Up 70ms</td> <td>40ms</td> <td>Down</td> <td>110ms</td> <td>300ms</td> </tr> </tbody> </table>		Full Load	No Load		Full Load	No Load	6V 8A	Up 20ms	10ms	Down	10ms	115ms	6V 800mA	Up 20ms	10ms	Down	30ms	115ms	15V 5A	Up 45ms	40ms	Down	10ms	100ms	15V 500mA	Up 45ms	40ms	Down	60ms	100ms	30V 3A	Up 45ms	40ms	Down	20ms	150ms	30V 500mA	Up 45ms	40ms	Down	50ms	150ms	60V 1.5A	Up 45ms	40ms	Down	50ms	300ms	60V 500mA	Up 70ms	40ms	Down	110ms	300ms
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Ripple and Noise (20MHz bandwidth):	Normal mode voltage: <0.4mVrms and 3mVp-p (15V, 30V & 60V O/Ps) <0.6mVrms and 2mVp-p (6V O/P) Normal mode current: <0.2mArms; <40µArms Low I range (15/30/60V O/Ps) <0.6mArms; <100µArms Low I range (6V O/P) Common mode current: <6µArms																																																						
Load Regulation:	For any load change, measured at the terminals, using remote sense: Voltage: <(0.01% + 2mV). Add typically 2.5mV for a 0.5V drop in the positive output lead. Specification applies for sense lead resistance <0.5Ω. Current: typically <(0.01% + 500µA).																																																						
Line Regulation:	Voltage: <(0.01% + 2mV) for 10% line change. Current: <(0.01% + 250µA) for 10% line change. Voltage: typically <(50ppm + 0.5mV)/°C Current: typically <(100ppm + 1mA)/°C; <(100ppm + 0.1mA)/°C Low I range.																																																						
Temperature Coefficient:	Output will withstand forward voltages of up to 20V (10V on 6V O/P) above rated output voltage. Reverse protection by diode clamp for currents up to 3A.																																																						
Output Protection:	Output trips off for over-temperature. Measure-and-compare over-voltage and over-current protection are implemented in firmware and can be set via the remote interfaces only. Output trips off for OVP and OCP. Setting resolution: 10mV and 1mA. Response time: typically 500ms. For manual operation (Local mode) OVP and OCP are fixed at 105% of the instrument range maximum.																																																						
OTP Protection: OVP and OCP Protection: (PL-P models only)																																																							

METER SPECIFICATIONS

Display Type:	Dual 4-digit meters, 10mm (0.39") LED.
Voltage:	Resolution 10mV, 15/30/60V O/Ps; 1mV, 6V O/P. Accuracy ±(0.1% + 10mV) 6/15/30/60V O/Ps.
Current:	Resolution 1mA; 0.1mA Low I range. Accuracy: Single / independent output: ± (0.3% + 3mA), QMD/QMT; Parallel mode: ± (0.5% + 3mA), All low I range: ± (0.3% + 0.3mA)
Current Meter Average:	Selects a 2s time constant (normally 20ms) for averaging of rapidly varying load currents.

ADDITIONAL SPECIFICATIONS - PL303QMD/PL303QMT

Independent Mode:	Each output is fully independent and isolated. Operation is equivalent to two single power supplies.
Tracking Mode:	The two outputs remain isolated but the Slave voltage controls are disabled and the Slave voltage is set equal to the Master voltage. Slave voltage = Master voltage ±(0.1% of Master voltage ±10mV).
Tracking Accuracy:	As tracking but the Slave voltage controls set an output voltage between 0% and 101% of the Master voltage. Once set, varying the Master voltage will create the same percentage change in the Slave voltage setting.
Ratio (%) Tracking Mode:	% change in Slave voltage = % change of Master voltage ± 0.1% ±10mV.
Tracking Accuracy:	The Master output operates as a single output power supply with twice the current capability (0.2mA to 6A). The Slave is disabled (and its displays are turned off).
Parallel Mode:	Each output has an independent DC On/Off control; these additional keys can be used to turn both outputs on or off simultaneously. These keys operate in all four modes.
Both On / Both Off:	

ANALOGUE REMOTE CONTROL (Single PL-P models only)

Non-isolated inputs and outputs to set voltage and current limit	
Control input and output scaling:	Rear panel control inputs (CV and CC) permit external 0V to 5V or 0 to 10V signals to set 0 to 100% of rated output voltage and current. Set values of 0 to 100% of rated output voltage and current generate 0 to 5V signals at the rear panel V _{out} and I _{out} outputs. These signals are referenced to the positive output.
Control input accuracy:	Voltage: 0.3% ±10mV. Input impedance 100kΩ; protected to 60V. Current: 0.5% ±5mA. Input impedance 64kΩ; protected to 60V.
Control output accuracy:	Voltage: 0.3% ±10mV. Current: 0.5% ±5mA. Output impedance: 125Ω; output short-circuit protected.
Remote Off:	Rear panel socket allows a switch closure or logic low to turn output off.

DIGITAL INTERFACES (PL-P models only)

Full digital remote control facilities are available through the RS232, USB, LAN and GPIB interfaces.	
Voltage Setting:	Resolution: 1mV; Accuracy: ± (0.05% + 5mV).
Voltage Readback:	Resolution: 1mV; Accuracy: ± (0.1% + 5mV).
Current Setting and Current Readback:	Resolution: 0.1mA; 0.01mA on Low I range, except 6V O/P: 1mA & 0.1mA. Accuracy: Single / independent output: ± (0.3% + 3mA) QMD/QMT Parallel mode: ± (0.5% + 3mA) All low I range: ± (0.3% + 0.3mA)
RS232:	Standard 9-pin D-connector. Baud rate 9600.
GPIB (optional):	Conforming with IEEE488.1 and IEEE488.2
USB:	Standard USB 2.0 hardware connection. Operates as a virtual COM port.
LAN:	Ethernet 10/100base-T hardware connection. 1.4 LXI Core 2011
Remote Command Processing Time:	Typically <25ms between receiving the command terminator for a step voltage change at the instrument and the output voltage beginning to change.

GENERAL

AC Input:	230V AC or 115V AC ± 10%, 50/60Hz. Installation Category II
Power:	Single: 280VA max. Dual: 560VA max. Triple: 840VA max.
Consumption:	
Operating Range:	+5°C to +40°C, 20% to 80% RH
Storage Range:	-40°C to +70°C
Environmental:	Indoor use at altitudes up to 2000m, Pollution Degree 2.
Cooling:	Intelligent variable-speed low noise fan assists convection. Over-temperature trip shuts down output if internal temperatures exceed predetermined thresholds.
Safety & EMC:	Complies with EN61010-1 & EN61326-1. For details, request the EU Declaration of Conformity for this instrument via http://www.aimtti.com/support (serial no. needed).
Size:	Single: 107mm x 131mm (¼ rack 3U) x 288mm L (PL-P: 343mm L), Dual: 214mm x 131mm (½ rack 3U) x 288mm L Triple: 321mm x 131mm (¾ rack 3U) x 288mm L
Weight:	Single: 4.5kg (PL-P: 4.9kg); Dual: 8.5kg; Triple: 12.6kg

OPTIONS

Rack Mount (RM450)
19 inch 4U rack mount suitable for up to four single power supplies, two dual power supplies, or any mixture. Blanking plates are provided for unused positions.

GPIB Interface (Option G)

Option G adds a GPIB interface. This is a factory-fit option only.

Remote Control Interfaces Table

Model	Analog	RS-232	USB	LAN (LXI)	GPIB
PL068-P	•	•	•	•	•
PL155-P	•	•	•	•	•
PL303-P	•	•	•	•	•
PL601-P	•	•	•	•	•
PL303QMD-P	•	•	•	•	•
PL303QMT-P	•	•	•	•	•
PL068-P(G)	•	•	•	•	•
PL155-P(G)	•	•	•	•	•
PL303-P(G)	•	•	•	•	•
PL601-P(G)	•	•	•	•	•
PL303QMD-P(G)	•	•	•	•	•
PL303QMT-P(G)	•	•	•	•	•

New models for 2013

The New PL and PL-P series has been extended by the introduction of a triple output model, and a low-voltage/high-current single.

New PL068 and PL068-P

These models have been introduced to meet the need for a high current linear regulated laboratory power supply.

The PL068 can provide current up to 8 amps whilst retaining the very low noise and fast dynamics common to the rest of the PL range.

Voltage is variable between 0V and 6V with a resolution of 1mV. Selectable remote sense ensures perfect regulation at the load.

Current meter resolution is 1mA right up to 8A, and a low-current range provides an optional resolution of 0.1mA.



New PL303QMT and PL303QMT-P

These new triple output models build upon the success of the PL303QMD and also offer an enhanced replacement for users of the PL330QMT from the previous PL series.

The PL303QMT has identical features to the PL303QMD but has a full performance third output with specifications as per the PL068 detailed above.

The size is 3/4-rack, so that one triple plus one single could be accommodated within a standard rack width.



Laboratory power supply series from TTI

TTi offers an extensive range of manual and remote control power supplies for both bench and system applications.

PLH & PLH-P series

Higher voltage (up to 250V) linear regulated power supply series in similar format to PL series. Single output. 90 to 94 watts. RS-232, USB and LAN controlled models with GPIB optional (PLH-P).

EL-R series

Compact linear regulated power supply series with analog controls. Single, dual and triple outputs. 30 to 130 watts. RS-232 controlled model available (EL302P).

QL & QL-P series II

High precision digitally controlled linear regulated power supply series with advanced features. Single and triple outputs. 105 to 220 watts. RS-232, USB, GPIB & LAN controlled models (QL-P).

EX-R series

Compact mixed-mode regulated power supply series with analog controls. Single, dual and triple outputs. 175 to 420 watts. RS-232 controlled model available (EX355P).

EX752M

Dual output multi-mode mixed-mode regulated power supply of 300 watts providing up to 150V in single output mode.

TSX & TSX-P series

High performance mixed-mode regulated single output power supply series with analog or digital controls. 360 watts. RS-232 and GPIB controlled models (TSX-P).

CPX and CPX-P series

Compact 'PowerFlex' regulated series with analog controls. Single or dual outputs 350 to 840 watts. RS-232, USB, LAN and GPIB controlled models (CPX-P)

QPX and QPX-P series

High power 'PowerFlex' regulated power supplies with digital controls. Single or dual outputs. 750 to 1200 watts. Analog, RS-232, USB, GPIB and LAN interfaces (QPX-P).

MX and MX-P series (new products for 2013)

Digitally controlled multi-output power supplies incorporating a large graphic LCD. Power in excess of 300 watts, range switching for increased flexibility. RS-232, USB and LAN controlled models with GPIB optional (MX-P).

Designed and built in Europe by:



Thurlby Thandar Instruments Ltd.

Glebe Road, Huntingdon, Cambridgeshire. PE29 7DR United Kingdom

Tel: +44 1480 412451 Fax: +44 1480 450409

Email: sales@aimtti.com Web: www.aimtti.com

Product Summary

Laboratory Power Supplies

Bench and system power supplies from 30 watts up to 1200 watts using linear, mixed-mode and PowerFlex regulation technologies.



Waveform Generators

Analog and digital (DDS) function generators, true arbitrary generators, arbitrary/function generators and pulse generators.



Precision Measurement Instruments

Benchtop DMMs, frequency counters, component measurement instruments (LCR), electronic dc loads, current probes.



RF and EMC Test Equipment

Spectrum analyzers, signal generators, frequency counters, power meters, emc measurement instruments.



Company name and product brands

Thurlby Thandar Instruments Ltd. (TTi) is one of Europe's leading manufacturers of test and measurement instruments.

Products have been sold under two brand names: TTi and Aim.



In the future, however, the full product range will be branded Aim-TTi.



This changeover will be gradual and many products will continue to carry the TTi or Aim brands for some time to come.

Web Addresses (URLs)

The preferred URL for obtaining information concerning Aim-TTi products is:

www.aimtti.com (international customers)

Customers in the UK should use the URL:
www.aimtti.co.uk

Customers in the USA should use the URL:
www.aimtti.us

Note that previous URLs such as www.tti-test.com will continue to operate for the time being.

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