

# LABORATORY DC POWER SUPPLIES

## SHORTFORM CATALOGUE

## A TECHNOLOGY LEADER

Aim-TTi is one of the world's major producers of laboratory power supplies (PSUs). It has been a major technology innovator in PSUs since 1979 and offers products ranging from 30 watts up to 1200 watts. Hundreds of thousands of Aim-TTi power supplies are in everyday use around the world.

### POWER TECHNOLOGIES

Aim-TTi laboratory power supplies use both linear and switch-mode technologies in order to optimize performance and value for money.



#### LINEAR REGULATION

Pure linear regulation still provides the lowest output noise and best transient response. The disadvantage is greater physical size and weight for a given power, together with higher heat output.



#### MIXED-MODE REGULATION

For higher power levels, Aim-TTi have developed a technology that uses switch-mode pre-regulation and linear final regulation. This technique combines exceptional efficiency with noise levels that are close to that of pure linears.



#### POWERFLEX & POWERFLEX+ REGULATION

The Aim-TTi PowerFlex system uses a modified form of mixed-mode regulation to provide higher levels of current when the voltage is set to lower values. PowerFlex+ uses a multi-phase conversion technique to eliminate the need for a linear final stage and offers an even wider range of voltage/current combinations.



#### SILENT COOLING

Many Aim-TTi power supplies use convection cooling thus removing the need for a fan and providing silent operation. Other models incorporate a fan to assist cooling, but use smart control techniques to minimise noise.

#### RACK MOUNTING

Many Aim-TTi PSU series, both bus programmable and manual, have a rack-modular casing size. Rack mounts are available for the PL, QL, TSX, MX, CPX and QPX series.

#### SAFETY BINDING-POST TERMINALS



In response to changing customer requirements, Aim-TTi has introduced a new terminal design to most of the power supply range. The new terminals accept a 4mm safety plug with rigid insulating sleeve; a requirement specified by an increasing number of laboratories for safety reasons. However, unlike the usual 4mm safety sockets, the new Aim-TTi terminals can also accept fork connectors or bare wires, giving maximum flexibility.



#### 3 YEAR WARRANTY

For all Aim-TTi products you can extend the standard one year warranty to three years by registering within three months of purchase. To register a product for extended warranty, visit [www.aimtti.com/3-year-warranty](http://www.aimtti.com/3-year-warranty)







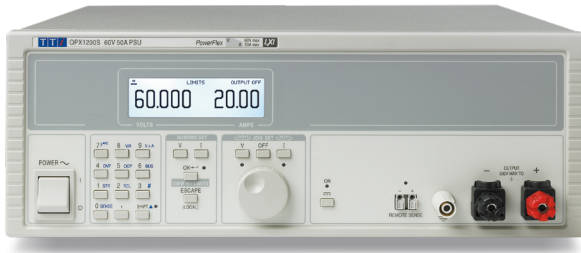












- ▶ Single or dual outputs
- ▶ 600W to 1200W power range
- ▶ Output noise: < 3mV rms.
- ▶ Higher currents at lower voltages

# QPX SERIES

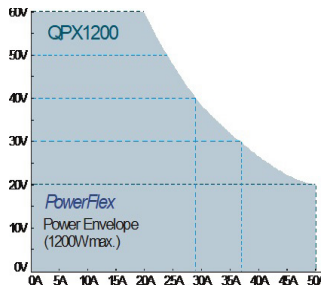
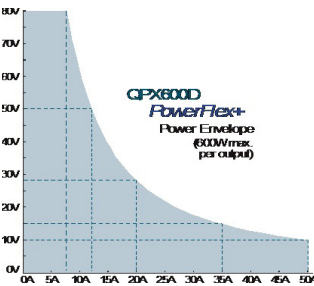


## POWERFLEX POWER SUPPLIES

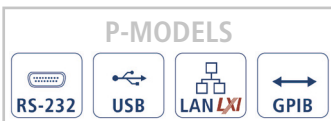
The QPX series offers users a level of flexibility that cannot be achieved with conventional laboratory power supplies. A conventional PSU has a fixed current limit giving a power capability that reduces directly with the output voltage. The Aim-TTI PowerFlex design enables higher currents to be generated at lower voltages within an overall power limit envelope. They can therefore perform the task of many different power supplies. These power supplies are suited to both bench-top and system applications with front and rear terminals and a wide range of interfaces.

QPX1200S & SP offer a current capability of 20 amps at the maximum output of 60 volts, the PowerFlex design offers increasing output current with reducing output voltage, see the PowerFlex diagram for more details. QPX600D & DP offer 1200 watts of maximum power, arranged as two isolated outputs of 600 watts each with PowerFlex+, offering a much wider flexing range of more than 6½:1. The QPX600D can be operated as two entirely independent power supplies, each with its own display. Alternatively, multiple tracking modes are available including series and parallel operation which provide metering of total voltage or total current respectively.

Model	Outputs	Voltage / Current	Power	Interfaces
QPX1200S	One	0 to 60V / 0 to 50A*	1200W	Analog only
QPX1200SP	One	0 to 60V / 0 to 50A*	1200W	RS232/USB/LAN/GPIB
QPX600D	Two	0 to 80V / 0 to 50A *	2 x 600W	Analog only
QPX600DP	Two	0 to 80V / 0 to 50A *	2 x 600W	RS232/USB/LAN/GPIB



- Line & load regulation: < 0.01%.
- Output noise: < 3mV rms.
- Setting accuracies:
  - Voltage- 0.1% ± 2mV
  - Current- 0.3% ± 20mA.
- Size: (WxHxD) 350 x 130 x 415mm



\* Note: maximum current is not available with maximum voltage see PowerFlex power envelope.



# OTHER RANGES AVAILABLE

## WAVEFORM GENERATORS



PULSE GENERATORS



ANALOG  
FUNCTION GENERATORS



DIGITAL  
FUNCTION GENERATORS



ARBITRARY GENERATORS

- ▶ Analog and Digital (DDS) function generators with frequency capability up to 240MHz.
- ▶ Dedicated pulse generators with true pulse capability.
- ▶ True variable-clock arbitrary generators with up to four channels.

## RF & EMC TEST EQUIPMENT



SIGNAL  
GENERATORS



SPECTRUM  
ANALYSERS



HARMONICS  
ANALYSERS



LOW-DISTORTION  
SOURCE

- ▶ RF signal generators with frequency capability up to 6GHz.
- ▶ Handheld RF spectrum analyzers with frequency up to 6GHz.
- ▶ EMC analyzers for power Harmonics and Flicker.

## PRECISION MEASUREMENT



MULTIMETERS



POSITIONAL  
CURRENT PROBES



FREQUENCY  
MEASUREMENT



COMPONENT  
MEASUREMENT

- ▶ Bench-top digital multimeters for dual display, system and logging.
- ▶ Innovative DC to 5MHz current probes for PCB tracks.
- ▶ Handheld and bench-top frequency counters up to 6GHz.
- ▶ Precision component measurements.

Visit [www.aimtti.com](http://www.aimtti.com) for full ranges and further information.

## EXCELLENCE THROUGH EXPERIENCE

Aim-TTI is the trading name of Thurlby Thandar Instruments Ltd. (TTI), one of Europe's leading manufacturers of test and measurement instruments.

The company has wide experience in the design and manufacture of advanced test instruments and power supplies built up over more than thirty years.

The company is based in the United Kingdom, and all products are built at the main facility in Huntingdon, close to the famous university city of Cambridge.

## TRACEABLE QUALITY SYSTEMS

TTI is an ISO9001 registered company operating fully traceable quality systems for all processes from design through to final calibration.



ISO9001:2015

Certificate number FM 20695

## WHERE TO BUY AIM-TTI PRODUCTS

Aim-TTI products are widely available from a network of distributors and agents in more than sixty countries across the world.

To find your local distributor, please visit our website which provides full contact details.

[www.aimtti.com](http://www.aimtti.com)

Designed and built in Europe by:



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