



### **Advanced features**

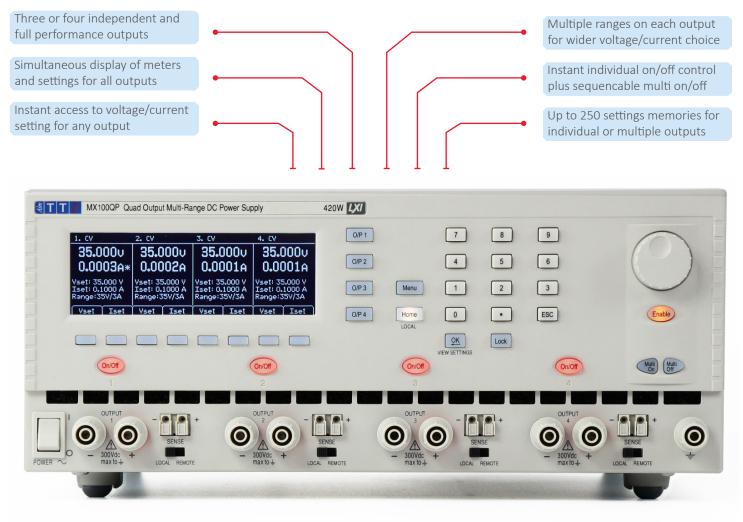
Three or four high performance outputs Wide choice of voltage/current combinations Graphic LCD with simultaneous display of outputs



## **MX SERIES** 315W to 420W Multi output dc power supplies

aimtti.com | aimtti.us

# KEY FEATURES







The MX series uses mixed mode regulation to provide up to 420W of power split across up to four outputs, this series differs from most other multi-output power supplies in offering full capabilities on all outputs.

Each output features CV or CI operation, simultaneous high resolution metering, switchable remote sensing, OVP and OCP trips, and an individual output switch. To increase its ability to match the widest range of applications, each output has more than one range giving the choice of higher voltage or higher current.

When higher power is required, up to two outputs can be disabled to provide twice the power from one or two outputs- up to 210 watts for the MX100T/MX100Q and up to 360 watts for the MX180T.

Three or four high performance outputs each with full functionality
Range switching gives variable voltage/current combinations
Shared power mode provides double power from a single output
Low output noise and ripple via linear final regulation
High setting resolution of up to 1mV and 0.1mA
Variable OVP and OCP trips on all outputs
50 setting memories per output plus 50 linked memories
Selectable voltage tracking (isolated tracking)
Selectable current meter averaging
Switchable remote sense capability
Graphic LCD provides simultaneous output metering
Numeric or spin-wheel control of all parameters
Individual or combined output on/off control with programmable delay sequencing
3U ½ rack or ¾ rack case for bench or rack mounting
<ul> <li>GPIB, RS-232, USB and LAN (LXI) interfaces (P models)</li> </ul>
Duplicate power and sense terminals at rear (P models)

Model Comparison	MX100T/TP (page 4)	MX100Q/QP (page 4)	MX180T/TP (page 5)
No. of outputs	3	4	3
Max. total power	315 watts	420 watts	378 watts
Max. power per output         105W + 105W + 105W         105W + 105W + 105W + 105W           or         105W + 210W         or         105W + 105W + 210W           or         210W + 210W         or         210W + 210W		180W + 180W + 18W or 360W + 18W	
Max. Volts/Amps from a single output	70V or 6A	70V or 6A	120V or 20A
Output 1 ranges	put 1 ranges 16V/6A, 35V/3A 16V/6A, 35V/3A, 35V/6A*		15V/10A, 30V/6A, 60V/3A, 15V/20A*, 30V/12A*, 60V/6A*, 120V/3A*
Output 2 ranges	16V/6A, 35V/3A, 35V/6A*	16V/6A, 35V/3A, 35V/6A*	15V/10A, 30V/6A, 60V/3A
Output 3 ranges	35V/3A, 70V/1.5A, 70V/3A*	35V/3A, 70V/1.5A, 70V/3A*	5.5V/3A, 12V/1.5A
Output 4 ranges		35V/3A, 70V/1.5A, 70V/3A*	
Case Size	212 x 130 x 375mm (WxHxD) (½ rack x 3U height)	317 x 130 x 375mm (WxHxD) (¾ rack x 3U height)	212 x 130 x 375mm (WxHxD) (½ rack x 3U height)

\* range available subject to another output being disabled (shared power mode).

### MX SERIES -CAPABILITIES AND APPLICATIONS



#### TYPICAL APPLICATION AREAS INCLUDE:

- Medium to high power bench-top applications requiring multiple outputs
- Situations where voltage and current requirements may vary widely between projects
- Powering rail sensitive circuits using the on/off synchronism and sequencing.
- Repetitive testing applications requiring multioutput settings memories
- High density system applications requiring multiple outputs from limited rack space
- Remote control applications where bus interface requirements may change

#### UP TO 250 SETTING STORES

Non-volatile stores are incorporated for rapid recall of voltage and current settings (along with Range, OVP and OCP). Each output has its own set of 50 setting stores.

#### MULTI-OUTPUT LINKED MEMORIES

In addition to the individual memories for each output, 50 further memories are provided that store settings for all outputs together.

#### MIXED-MODE REGULATION

To provide its impressive power density the MX series combines high frequency switch-mode pre-regulation with linear postregulation to offer performance that comes close to that of an all-linear design.

Excellent line and load regulation is matched by low noise and good transient response.

#### DOUBLE POWER FROM A SINGLE OUTPUT

When a higher power level is needed, up to two outputs can be disabled to provide 210 watts (MX100T/ MX100Q) or 360 watts (MX180T) from a single output.

1. CV	2. SET	3. CV	REM 品
35.000v		70.0	)Ov
3.0000A	Output 2 is not available when output 3 range	3.00	)0a
Vset: 35.000 V Iset: 3.0000 A	is 70V/3A	Vset: 70 Iset: 3.	000 A
Range:35V/3A		Range:7 Vset	Iset

#### HIGH SETTING RESOLUTION

For applications requiring the highest accuracy and resolution, up to 5 digit setting and metering is provided for voltage and current. Best resolution is 1mV/0.1mA (MX100T/ MX100Q) and 1mV/1mA (MX180T).



#### OVP AND OCP TRIPS

Variable trips for over-voltage and over-current are provided on each output. Unlike a limit setting, the trip setting turns the output off and provides a different level of protection.

For example, when repetitively testing a unit which normally takes a peak current of 4A; the current limit could be set to 5A and the OCP to 4.1A to ensure that a faulty unit will trip the supply off and not be damaged by over dissipation.

#### CURRENT METER AVERAGING

When measuring rapidly varying loads it can become difficult to get useful readings from a digital current meter.

By selecting meter averaging, the reading is stabilised by displaying the average of several readings to reduce the speed and extent of the variation.

#### INDIVIDUAL OUTPUT DISPLAY

Each output also has an individual display mode which provides larger digits and enables OVP, OCP, current meter averaging and range to be viewed and changed. Access to 50 memory stores for the output is also available from this screen

#### VOLTAGE TRACKING

All outputs are completely independent and isolated. However, it is possible to configure the power supply so that the voltage on an output automatically tracks the voltage on another output.

Because the outputs are isolated, tracking can be used to set equal voltage of the same polarity or opposite polarities. It can be particularly useful when outputs have been wired in parallel or series where control can be made by adjusting a single output voltage.

#### CLARITY AND EASE-OF-USE

Unlike some other multi-output power supplies, the MX Series displays voltage, current and other essential information for all outputs simultaneously.

The illuminated keypad includes soft keys via which voltage or current can be instantly set for any output, or which can be used to set up other functions using a menu system.

Values can be set numerically direct from the keypad or can be adjusted in a quasi-analog manner using the control knob.

#### ON/OFF SYNCHRONISM AND SEQUENCING

A unique capability of the products is synchronous on/off switching and programmable on/off sequencing.

Many circuits can be damaged if one voltage rail is present without the other, or if voltage rails are not applied in the correct order. In addition to the individual output on/off buttons there are further buttons for Multi-On and Multi-Off.

By default these turn all of the outputs on or off simultaneously. They can also be set to operate any combination of outputs in a user defined sequence with delays between 10 milliseconds and 20 seconds.



	SET PROGRAMMED ON/OFF
	MultiOn Action MultiOff Action
Output 1	Quick Off after 250ms
Output 2	On after 400ms 0ff after 500ms
Output 3	On after 880ms 🛛 🕨 Quick
[	Tab > Quick None Delay OK/Exit

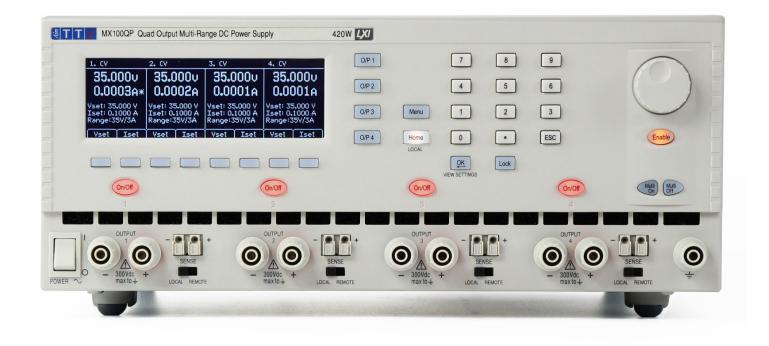
#### FRONT PANEL LOCKING

An illuminated front panel key locks out the keypad to guard against accidental mis-setting.

For even greater security, as might be required when the PSU is incorporated into a fixed system, the keypad can optionally be locked using a pass code chosen by the user.

VOLTAGE TRACKING OPTIONS			
	Option 1	Option 2	Option 3
MX180T	V2 tracks V1	-	-
MX100T	V2 tracks V1	V3 tracks V2	V2 & V3 track V1
MX100Q	V2 tracks V1	V4 tracks V3	V2 tracks V1 & V4 tracks V3

### MX100T AND MX100Q -TRIPLE AND QUAD OUTPUTS



- Three or four high performance outputs of 105 watts each 3 x (0 to 35V at 0 to 3A) or 4 x (0 to 35V at 0 to 3A)
- Total power of 315 or 420 watts in a compact package
- Range switching gives up to 70 volts and up to 6 amps
- Many range combinations for maximum flexibility
- Up to 210 watts from a single output
- High setting resolution of up to 1mV and 0.1mA

#### FULL PERFORMANCE OUTPUTS - 105W EACH

The MX100T and MX100Q differ from most other multi output power supplies in having three or four outputs of equal power, each with the ability to provide 35V at 3A.

Each output features CV or CI operation, simultaneous high resolution metering, switchable remote sense, and an individual output switch.

#### MULTIPLE RANGES | POWER SHARING

Outputs can also be combined internally to provide up to 210 watts of power as either 35V/6A or 70V/3A from a single output.

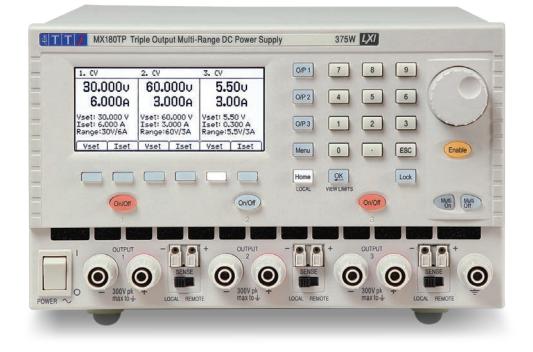
MX100T RANGE CHOICES			
	Output 1	Output 2	Output 3
Range 1	35V/3A	35V/3A	35V/3A
Range 2	16V/6A	16V/6A	70V/1.5A
Range 3	-	35V/6A*	70V/3A*

\* = subject to another output being disabled (shared power mode)

MX100Q RANGE CHOICES				
	Output 1	Output 2	Output 3	Output 4
Range 1	35V/3A	35V/3A	35V/3A	35V/3A
Range 2	16V/6A	16V/6A	70V/1.5A	70V/1.5A
Range 3	35V/6A*	35V/6A*	70V/3A*	70V/3A*

\* = subject to another output being disabled (shared power mode)

### MX180T -TRIPLE OUTPUT WITH HIGHER POWER



- Two high power outputs plus one low power output 2 x 180 watts plus 1 x 18 watts
- Total power of over 375 watts in a highly compact package
- Range switching gives up to 120 volts and up to 20 amps
- ▶ Twenty six range combinations for maximum flexibility
- Up to 360 watts from a single output
- High setting resolution of 1mV and 1mA

#### HIGH POWER MAIN OUTPUTS - 180W EACH

The MX180T offers significantly higher power than most triple output supplies with two identical outputs that can be set as 30V/6A, 15V/10A or 60V/3A.

The third lower power output is fully variable from 0 to 12V with both CV and CI operation, OVP/OCP trips, remote sensing other facilities as per the main outputs.

#### MULTIPLE RANGES | POWER SHARING

Outputs one and two can also be combined internally to provide up to 360 watts of power as either 15V/20A, 30V/12A, 60V/6A or 120V/3A from a single output.

MX180T RANGE CHOICES			
	Output 1	Output 2	Output 3
Range 1	30V/6A	30V/6A	5.5V/3A
Range 2	15V/10A	15V/10A	12V/1.5A
Range 3	60V/3A	60V/3A	_
Range 4	30V/12A*	-	_
Range 5	15V/20A*	-	_
Range 6	60V/6A*	-	_
Range 7	120V/3A*	-	-

\* = output 2 disabled (shared power mode)

### P-MODELS -REMOTE CONTROL INTERFACES





USB provides a simple and convenient means of connection to a PC and is particularly appropriate for small system use.

The interface uses a standard USB 2.0 hardware connection and is implemented as virtual-COM port. A Windows\* USB driver is provided.



An RS-232 interface is also provided for use with legacy systems.



The GPIB interface is compliant with IEEE-488.1 and IEEE-488.2. GPIB remains one of the most widely used interfaces for system applications.



The LAN interface uses a standard 100/10 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.



The LAN interface is compliant with LXI (LAN eXtensions for Instrumentation).

LXI 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.

#### REAR OUTPUT TERMINALS

On the-P versions of each product, output and remote sense terminals are mounted both on the front and rear panels.

#### LOW NOISE COOLING

The MX series uses an intelligent fan controller which monitors both ambient temperature and power loading.

#### BENCH OR RACK MOUNTING

The MX Series power supplies are housed in compact cases that use minimum bench space. For triple output units, the case is half-rack width by 3U high and a rack kit capable of mounting one or two units is available as an option. For quad output units, the case is three quarter rack width by 3U high. Front input ventilation ensures that no additional space is needed top or bottom.

#### LABVIEW & IVI DRIVER

An IVI driver for Windows\* is included. This provides support for common highlevel applications such as LabView\*, LabWindows\*, and Keysight VEE\*.

### **TECHNICAL SPECIFICATIONS**

MODEL	MX100T & MX100TP	MX100Q & MX100QP	MX180T & MX180TP
OUTPUT SPECIFIC	ATIONS		
OUTPUT 1			
Range 1:	0V to 35V a	at 1mA- 3A	OV to 15V at 1mA to 10A
Range 2:	0V to 16V a	at 1mA- 6A	OV to 30V at 1mA to 6A
Range 3:	-	0V to 35V at 1mA to 6A*	0V to 60V at 1mA to 3A
Range 4:	-	-	0V to 15V at 1mA to 20A*
Range 5:	-	-	0V to 30V at 1mA to 12A*
Range 6:	-	-	0V to 60V at 1mA to 6A*
Range 7:	-	-	0V to 120V at 1mA to 3A*
OUTPUT 2			· ·
Range 1:	0V to 35V a	t 1mA to 3A	0V to 15V at 1mA to 10A
Range 2:	0V to 16V a	t 1mA to 6A	0V to 30V at 1mA to 6A
Range 3:	0V to 35V at	1mA to 6A*	0V to 60V at 1mA to 3A
OUTPUT 3			
Range 1:	0V- 35V at	1mA to 3A	0V to 5.5V at 10mA to 3A
Range 2:	0V- 70V at 1	0V- 70V at 1mA to 1.5A	
Range 3:	0V- 70V at 1	1mA to 3A*	-
OUTPUT 4			· ·
Range 1:	-	0V to 35V at 1mA to 3A	-
Range 2:	-	0V to 70V at 1mA to 1.5A	-
Range 3:	-	0V to 70V at 1mA to 3A*	-
			* Available with at least one other output disable
ALL OUTPUTS			
Operating mode:	Constant voltage or constant current wit	h automatic cross over and mode indi	cation.
Voltage setting:	By direct numeric entry or quasi-analog	rotary wheel	
	Resolution 1mV , (Resolution 10mV: 70V	range outputs 3 & 4)	Resolution 1mV , (Resolution 10mV: Output 3)
Current setting:	By direct numeric entry or quasi-analog	rotary wheel	
	Resolution 0.1mA		Resolution 0.1mA
			Resolution 10mA (Output 3 only)
Setting stores:	Up to 50 set-ups can be saved and recall	ed via the keyboard (or the digital inte	rfaces on the p-versions)
Load regulation:	<0.01% +5mV (CV mode) for any load ch		
Line regulation:	<0.01% +5mV (CV mode) for a 10% line v	voltage change	
Sensing:	Selectable local or remote sensing		
OUTPUT 1 & 2			
Setting accuracy:	Voltage: 0.05% of reading ± 3mV		Voltage: 0.05% of reading ± 3mV
	Current: 0.3% of reading ± 3mA - 3A 0.5% of reading ±3mA - 6A		(± 30mV on 120V range) Current: 0.3% of reading ± 3mA to 3A 0.5% of reading ± 3mA to 10A 0.5% of reading ± 4mA to 20A

	Current: 0.3% of reading ± 3mA - 3A 0.5% of reading ±3mA - 6A		0.5% of reading ± 3mA to 3A 0.5% of reading ± 3mA to 10A 0.5% of reading ± 4mA to 20A
Ripple and noise: (20MHz bandwith)	Typically <0.5mV rms, <5mV pk-pk, 1mV rms max.		Typically <2mV rms, <15mV pk-pk, 3mV rms max. 120V range: <4mV rms, <30mV pk-pk, 6mV rms max.
		Rear terminals 10mV pk-pk max	
Transient response:	Front terminals: <100µs	Front terminals: <150µs	Front terminals: <150µs (ranges 4,5 & 6 <400µs)
(To within 50mV of set level for 5% to 95% load change)		Rear terminals: <500µs (range 3)	
Over voltage trip:	Settable 1V- 40V in 0.1V steps		Output 1 Settable 1V to 130V in 0.1V steps
			Output 2 Settable 1V to 70V in 0.1V steps
Over current trip:	Settable 0.1A- 7A in 0.01A steps		Output 1 Settable 0.1A to 21A in 0.01A steps
			Output 2 Settable 0.1A to 11A in 0.01A steps

MODEL	MX100T & MX100TP	MX100Q & MX100QP	MX180T & MX180TP
OUTPUT 3 & 4 ( OUTPU	JT 4 MX100Q & MX100QP ONLY)		
Setting accuracy:	Voltage: 0.1% of reading ± 10mV	Voltage: 0.1% of reading ± 10mV	
	Current: 0.3% of reading ± 3mA to 3A		Current: 0.3% of reading ± 20mA
Ripple and noise: (20MHz bandwith)		Front terminals: Typically <0.5mV rms, <5mV pk-pk, 1mV rms max. 70V range: typically <1mV rms, <10mV pk-pk, 1.5mV rms max.	
Transient response:	<100µs to within 50mV of set level for 5% to 95% load change		
Over voltage trip:	Settable 1V to 80V in 0.1V steps	1	Settable 1V to 14V in 0.1V steps
Over current trip:	Settable 0.1A to 3.5A in 0.01A steps		Settable 0.1A to 3.5A in 0.01A steps
OUTPUT PROTECTION			
External voltage:	Output will withstand forward voltages or 80V (O/P3, O/P4).	·····	Output will withstand forward voltages of up to 140V (O/P 1), 70V (O/P 2) or 20V (O/P 3)
	Reverse protection by diode clamp, 3A		
Fault trip:	The output will be shut down if a trip co		
OVP or OCP:	Exceeding the over-voltage or over-curr		
Over temperature:	Monitors internal temperature rise to p	rotect against excess ambient temperatu	re or blocked ventilation slots.
CONNECTIONS			
Output terminals:	Universal 4mm safety binding posts on	19mm (0.75") at front. Screw terminals at	t rear (P-models only)
	Terminals can accept fixed shroud 4mm	plugs, standard 4mm plugs, fork termina	ls and bare wires.
Sense terminals:	Sprung loaded screw-less terminals at f	ront. Screw terminals at rear (P-models o	nly)
OUTPUT ON/OFF S	WITCHING		
ndividual on/off:	Individual keys for each output. On state	e indicated by key illumination	
Multi-on/ multi-off:	Separate keys enable any combination of outputs to be turned on or off either simultaneously (default) or with timed delays from		
	10ms to 20s. Delayed operation indicate	ed by flashing key illumination.	
VOLTAGE TRACKIN	G		
The power s	supply can be set so that the voltage of an ou	tput is automatically set equal to that of	another output and tracks any changes.
Tracking modes:	V2 tracks V1 V3 tracks V2 V2 & 3 both track V1	V2 tracks V1 V4 tracks V3 V2 tracks V1 & V4 tracks V3	V2 tracks V1
SETTING MEMORIE			
	S	1	
NDIVIDUAL OUTPUT I		1	
No. of stores:	MEMORIES		
No. of stores: Parameters stored:	S0 per output         Range, set volts, set current , OVP, OCP		
No. of stores: Parameters stored: LINKED OUTPUT MEM	S0 per output         Range, set volts, set current , OVP, OCP		
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores:	MEMORIES 50 per output Range, set volts, set current , OVP, OCP ORIES	Dutput on/off status (for all outputs)	
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores:	MEMORIES 50 per output Range, set volts, set current, OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP,	putput on/off status (for all outputs)	
INDIVIDUAL OUTPUT I No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores: Parameters stored: METERING (EACH C	MEMORIES 50 per output Range, set volts, set current, OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP, DUTPUT) Output 1:	All outputs:	Output 1 & 2:
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores: Parameters stored: METERING (EACH C	MEMORIES 50 per output Range, set volts, set current, OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP, DUTPUT) Output 1: 5 digit voltage and current meters	All outputs: 5 digit voltage and current meters	5 digit voltage and 4 digit current meters
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores: Parameters stored: METERING (EACH C	MEMORIES 50 per output Range, set volts, set current, OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP, DUTPUT) Output 1:	All outputs:	
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores: Parameters stored: METERING (EACH C	MEMORIES 50 per output Range, set volts, set current, OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP, DUTPUT) Output 1: 5 digit voltage and current meters Output 2 & 3:	All outputs: 5 digit voltage and current meters Output 3 & 4 at 70V: 4 digit voltage meters	5 digit voltage and 4 digit current meters Output 3:
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores: Parameters stored: METERING (EACH C Meter function:	MEMORIES 50 per output Range, set volts, set current , OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP, OUTPUT) Output 1: 5 digit voltage and current meters Output 2 & 3: 4 digit voltage and current meters Simultaneous display of actual and set v 1mV/0.1mA (O/P 1)	All outputs: 5 digit voltage and current meters Output 3 & 4 at 70V: 4 digit voltage meters ralues. 1mV/0.1mA	5 digit voltage and 4 digit current meters Output 3: 3.5 digit voltage and current meters 1mV/1mA (O/P 1 & O/P 2)
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores: Parameters stored: METERING (EACH C Meter function: Meter resolution:	MEMORIES 50 per output Range, set volts, set current, OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP, DUTPUT) Output 1: 5 digit voltage and current meters Output 2 & 3: 4 digit voltage and current meters Simultaneous display of actual and set v 1mV/0.1mA (O/P 1) 10mV/1mA (O/P 2 & 3)	All outputs: 5 digit voltage and current meters Output 3 & 4 at 70V: 4 digit voltage meters alues.	5 digit voltage and 4 digit current meters Output 3: 3.5 digit voltage and current meters
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores: Parameters stored: METERING (EACH O Meter function: Meter resolution: Meter accuracy:	MEMORIES 50 per output Range, set volts, set current , OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP, OCP, OCP, OCP DUTPUT) Output 1: 5 digit voltage and current meters Output 2 & 3: 4 digit voltage and current meters Simultaneous display of actual and set v 1mV/0.1mA (O/P 1) 10mV/1mA (O/P 2 & 3) As per setting accuracy (CV mode)	All outputs: 5 digit voltage and current meters Output 3 & 4 at 70V: 4 digit voltage meters ralues. 1mV/0.1mA	5 digit voltage and 4 digit current meters Output 3: 3.5 digit voltage and current meters 1mV/1mA (O/P 1 & O/P 2)
No. of stores: Parameters stored: LINKED OUTPUT MEM No. of stores: Parameters stored: METERING (EACH C Meter function:	MEMORIES 50 per output Range, set volts, set current , OVP, OCP ORIES 50 Range, set volts, set current, OVP, OCP, OCP, OCP, OCP DUTPUT) Output 1: 5 digit voltage and current meters Output 2 & 3: 4 digit voltage and current meters Simultaneous display of actual and set v 1mV/0.1mA (O/P 1) 10mV/1mA (O/P 2 & 3) As per setting accuracy (CV mode)	All outputs: 5 digit voltage and current meters Output 3 & 4 at 70V: 4 digit voltage meters ralues. 1mV/0.1mA	5 digit voltage and 4 digit current meters Output 3: 3.5 digit voltage and current meters 1mV/1mA (O/P 1 & O/P 2)

#### DIGITAL BUS INTERFACES ( P-MODELS ONLY )

The P-models in the MX series offer full remote control and read back using USB, RS-232, GPIB or LAN (compliant with LXI). All interfaces are at ground potential and opto-isolated form the output terminals.

	·
RS-232	Standard 9 pin D connector
USB	USB 2.0 connection ( backwards compatible with USB 1.x ) Operates as a virtual COM port.
GPIB (IEEE-488)	The interface conforms with IEEE-488.1 and IEEE-488.2
LAN:	Standard 10/100 base- T hardware connection. ICMP and TCP/IP protocol for connection to local area network or direct connection to a single PC.
LXI compliance:	LAN interface is compliant with LXI core 2011. (LXI is the abbreviation for Lan eXtensions for instrumentation) For more information visit: www.aimtti.com/go/lxi

#### DIGITAL PROGRAMMING PERFORMANCE ( P-MODELS ONLY )

#### PROGRAMMING SPEED

Command delay:

Typically <120ms between receiving the command terminator for a step voltage change at the instrument and the output beginning to change.

#### **OUTPUT RESPONSE**

MX100T & MX100TP / MX10	00Q & MX100QT					
Range	Direction	90% load	No load	Direction	90% load	No load
16V/6A	Up	10ms	10ms	Down	10ms	350ms
35V/3A	Up	10ms	10ms	Down	35ms	550ms
35V/6A	Up	10ms	10ms	Down	20ms	550ms
70V/3A	Up	25ms	12ms	Down	60ms	600ms

The above figures are indicative only and will be affected by load and load capacitance.

MX180T & MX180TP						
Range	Direction	90% load	No load	Direction	90% load	No load
30V/6A	Up	6ms	6ms	Down	50ms	3s
15V/10A	Up	6ms	6ms	Down	20ms	2s
60V/3A	Up	15ms	10ms	Down	220ms	5s

The above figures are indicative only and will be affected by load and load capacitance.

#### DRIVER SOFTWARE SUPPLIED (P-MODELS ONLY)

IVI driver:	An IVI driver for Windows* is supplied. This provides support for common applications such as LabView* LAbWindows* KeysightVEE* ect
USB driver:	An installation file is supplied which calls a standard Windows * USB driver
	*LabView and LabWindows are trademarks of National Instrauuments, *Keysight VEE is a trademark of Keysight Technologies. * Windows is a trademark of Microsoft.

#### GENERAL SPECIFICATIONS

INPUT:					
AC input:	110V to 240V AC ± 10%, 50/60Hz. Installation category II				
Input power:	500VA max.	650V max.	600VA max.		
TEMPERATURE & ENVIR	ONMENTAL				
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 fans				
SAFETY & EMC					
Safety:	Complies with EN61010-1				
EMC:	Complies with EN61326				
PHYSICAL					
Size: (Excludes feet, knob & terminals)	212 x 130 x 375mm* (WxHxD) Half rack x 3U height.	320 x 130 x 375mm* (WxHxD) Three quarter rack x 3U height	212 x 130 x 375mm* (WxHxD) Half rack x 3U height.		
Weight:	4.8kg (MX100T) 4.9kg (MX100TP)	7.3kg (MX100Q) 7.5kg (MX100QP)	5.0kg (MX180T) 5.1kg (MX180TP)		
OPTIONS					
Rack mount:	19" rack mount for one or two units	19" rack mount for one unit	19" rack mount for one or two units		
Thurlby Thandar Instruments Ltd. C	Deprates a policy of continuous development and reserv	es the right to alter specifications without prior notice			

General specifications apply for the temperature range 5°C to 40°C. Accuracy specification apply for the temperature range 18°C to 28°C after 1 hour warm up.



### **POWER SUPPLY RANGE** •





**QPX SERIES** 

750 - 1200 WATTS

POWERFLEX & POWERFLEX+

DIGITAL CONTROLS

1 & 2 OUTPUTS

RS232, USB, LAN, GPIB

### OTHER RANGES AVAILABLE

### WAVEFORM GENERATORS



PULSE GENERATORS



ANALOG FUNCTION GENERATORS

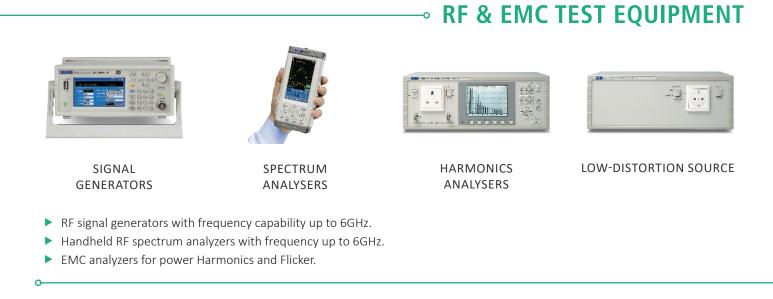


DIGITAL FUNCTION GENERATORS



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.





MULTIMETERS



POSITIONAL CURRENT PROBES



FREQUENCY MEASUREMENT



**PRECISION 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.

#### **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 www.aimtti.us

Designed and built in Europe by:



Thurlby Thandar Instruments Ltd. Glebe Road, Huntingdon, Cambridgeshire. PE29 7DR United Kingdom Tel: +44 (0)1480 412451 Fax: +44 (0)1480 450409 Email: sales@aimtti.com Web: www.aimtti.com

