



ADX Electronics Limited
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ITECH 6122 precision supply / DVM



- **IT6122 model = 0-32V / 0-3A precision programmable**
 - 6 digit precision, high accuracy, high speed sequencing.
 - Bright alphanumeric VFD display shows 4 values at once.
 - Independent DVM with great precision ohmmeter function.
 - Compact 2U half rack size with rack mount kit option.
 - CV and CC modes, overvolt protect, remote volt sense.
 - Inbuilt sequencer with digital I/O and trigger sources.
 - Standard SCPI commands over RS232 / USB interface.
 - Low ripple and noise with excellent regulation (linear).
 - Multiple supplies can be used in series or parallel.
 - Fully protected (overvolt, overtemperature, reverse).
 - Temperature controlled variable speed fan cooling.
- for ATE. desian test. QA. component test. communications...

BEST
value

Where else can you get a high speed precision programmable supply plus 5.5 digit system DVM for \$1,725?

ITECH 6122	32V 3A 100W	\$1725	100uV/10uA resolution, high speed by far the best value
Keithley 2420	60V 3A 60W	\$10000	similar in many ways - great unit, but extremely high price
Agilent E3645A	35V/60V 2.1A/1.3A 78W	\$1717	not a precision unit, much same price

* see back page for a more detailed comparison

* prices do not include GST - see back page for more info

BEST
expertise

- Who else has experience actually manufacturing precision instrumentation, power supplies, and electronic loads?
- Who else has experience actually using these products in design and development?
- I am a professional electronics design engineer (BE Hons, ME) consulting since 1994.
- I have specialised in building precision instrumentation, power supplies, and started up NZ's premier (and possibly only) electronic load manufacturer in 1997.

BEST
support

- Christchurch based sales, repairs and design support.
- 1 year warranty. Exclusive money back guarantee.
- No compromise on quality - we wouldn't sell it if it didn't meet our own standards.
- Basic on site support for mission critical applications is free in Christchurch.
- Advanced support is available, including emergency dispatch of "loaner" units.
- If you are not fully satisfied with a supply, return it for a full refund.

Models matrix

voltage approx power	0-20V	0-32V	0-72V	price (ex GST)	Availability preferred models may be in stock special order
100W	IT6821 0-5A 100W	IT6822 0-3A 102W	IT6823 0-1.2A 86W	\$1725	
325W	IT6151 5V, 65A			poa	
600W	IT6152 20V, 30A	IT6153 30V, 0-20A	IT6154 60V, 10A	poa	

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Sales details

ABOUT THE PRICE (WHY SO CHEAP?)

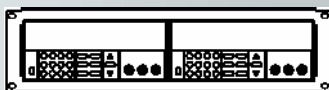
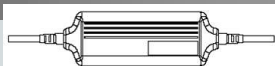
- Direct sales and heavy discounts - buy now and save!
- No advertising or overheads yet - buy now and save!
- Based on current exchange rate - buy now and save!
- As an introductory offer, includes heavily discounted comms cable option (usually \$70 or \$90).
- Further discounts available for quantity orders, long lead orders, reduced support, no comms module... ASK.
- 7 day credit terms available for established businesses.

AVAILABILITY

- We intend to keep units in stock **MAYBE NOT THIS UNIT YET**, lead time is 1 month for larger orders depending on discounts and stock.

Options

- Extra comms modules
RS232 \$70 USB \$90
- 19" rack mount
\$100
(fits 2 supplies or loads)
- Local burn-in and retest



Product details

QUALITY

- intelligent design, fibreglass PCBs, quality components
- calibration report supplied, CE certified
- rock-solid performance is guaranteed
- we no longer give every unit a full check over (there is no need), but we still inspect samples at our local factory

CONNECTIVITY AND CONTROL

- RS232 and USB interfaces (optoisolated)
- Standard SCPI interface protocol
- ActiveX interfacing library (VB and Delphi samples provided)
- Free application software provided (calibration, control / plotting of EUT currents / voltages)

USABILITY

- form factor and menu operation similar to Keithley 2000 series equipment, also similar looks and use to HP units
- configurable presets, key beep etc

SUPPLIED WITH

- RS232 or USB communications smart-cable (for now)
- IEC cable
- Calibration report. Control software. Calibration software. ▼

The stuff you don't usually hear about until it's too late...

POSITIVES

- **reverse protected** (won't blow up when power is pumped back into it - regenerating motor, overcharged battery, another supply in parallel)
- **no nasty dropouts** (eg application of load causes voltage to dip - can upset circuits on startup and lead you on wild goose chases)
- **speed controlled fans** (no need for continuous noise like some of the leading brands) (but see note to right)
- **electromagnetically quiet and immune CE** approved, less likely to get upset by immunity testing, linear regulation (not a switchmode)

NEGATIVES

- Despite temperature control, the fans can still be quite noisy. If acoustic performance is critical, please ask about modifications available. **6122 IS BETTER THO**
- Up (very) close the finish is not quite as clean as a Keithley or similar (but the product is still functional and robust, inside and out).



Detailed specifications

Parameter	Conditions	Voltage	Current
Load regulation		<0.01%+2mV	<0.05%+1mA
Line regulation		<0.01%+3mV	<0.05%+1mA
Program resolution		100µV (correct, error in manual)	100µA
Measurement resolution		100µV	10µA
Program accuracy	25°C±5°C 12 Months	<0.02% ±2mV	<0.05% ±1mA
Readback accuracy	25°C±5°C 12 Months	<0.03% ±3mV	<0.05 % ±1mA
DVM accuracy	25°C±5°C 12 Months	100µV <12V, acc same as above	10µOhm on resistance range
Program & Meas tempco	0 - 40 °C	<0.02%+3mV	<0.05%+2mA
Ripple	20Hz to 20MHz	<0.5mV RMS / 2mV p-p	<3mA RMS
Programming speed	(probably to 10% / 90%)	50ms	tbd, probably similar

Detailed competitive comparison

Model	prog ?	V	A	W	price	noise	reg	display counts / resolution / accuracy	comment
ITECH IT6122	yes	33V	3.1A	102W	\$1725	2mV (p-p)	0.01%+2mV (load)	320k*100µV +-0.03% 310k*10µA +-0.05%	by far the best value
Keithley 2420	yes	60V	3A	60W	\$10000	1.5mV (p-p)	0.01%+100µV (load)	200k*300µV 0.015% 100k*30µA +-0.052%	similar in many ways - great unit, but extremely high price
Agilent E3634A	yes	25V (50V)	7A (4A)	200W	\$2439	0.35mV 2mA	0.01%+2mV	35000*1mV +-0.05% 40000*1mA +-0.15%	less precision, no independent DVM function, more expensive
Agilent E3645A	yes	35V (60V)	2.1A (1.3A)	78W	\$1717	1mV 4mA	0.01%+3mV	3500*10mV +-0.05% 2100*1mA +-0.15%	same price, not in the same class