

ITECH 6832 programmable power supply



- **IT6832 model = 0-32V / 0-6A fully programmable**
- High accuracy and resolution on bright VFD display.
- Nice appearance, compact size (2U half rack).
- Constant voltage (CV) and constant current (CC) limiting.
- Fully programmable via front panel or RS232 / USB.
- Fully protected (over current, over temperature).
- Stores 16 operating states internally.
- Free software for calibration, control and measurement.
- Low ripple and noise. Excellent load and line regulation.
- Multiple supplies can be used in series or parallel.
- Temperature controlled variable speed fan cooling.
 → for ATE, design test, QA, go/no go test, battery testing...

BEST value

Where else can you get a programmable supply for under \$800?

Model	Specs	Price	Notes
ITECH IT6832	32V 6.2A 200W	\$795	by FAR the best value!
Agilent E3645A	35V/60V 2.1A/1.3A 78W	\$1717	similar specs but much lower power, expensive
Keithley 2420	60V 3A 60W	\$10000	extremely high precision, extremely high price (similar looks)
Topward 3306D	30V 6A 200W	\$595	same power, not programmable, not that much cheaper either

* 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	0-18V	0-32V	0-72V	price (ex GST)	Availability preferred models may be in stock larger orders
50W	IT6811 0-3A 54W	IT6812 0-1.5A 48W	(not available)	\$595	
100W	IT6821 0-5A 90W	IT6822 0-3A 96W	IT6823 0-1.5A 108W	\$695	
200W	IT6831 0-10A 180W	IT6832 0-6A 192W	IT6833 0-3A 216W	\$795	

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, 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)
- Labview driver (exclusive to ADX, locally developed)
- 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. ▼

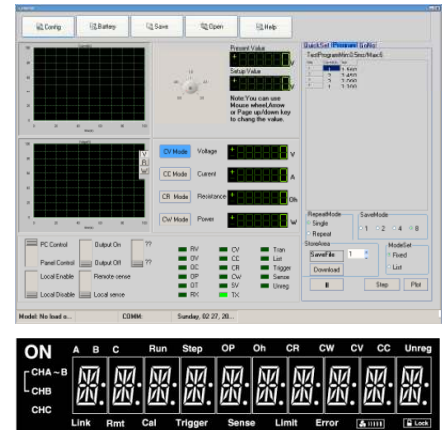
The stuff you don't usually hear about until it's too late...

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.
- 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%+3mV	<0.1%+2mA
Line regulation		<0.01%+3mV	<0.1%+2mA
Program resolution		10mV	10mA
Measurement resolution		10mV (<20V) 100mV (>20V)	10mA
Program accuracy	25°C±5°C 12 Months	<0.05% ±10mV	<0.2% ±10mA
Measurement accuracy	25°C±5°C 12 Months	<0.05% ±15mV	< 0.15% ±15mA
Program & Meas tempco	0 - 40 °C	<0.02%+5mV	<0.1%+5mA
Ripple	20Hz to 20MHz	<1mV RMS / 3mVp-p	<5mA RMS

Detailed competitive comparison

Model	prog ?	V	A	W	price	noise	reg	display counts / resolution / accuracy	comment
ITECH IT6832	yes	32V	6.2A	200W	\$795	1mV 5mA	0.01%+3mV (<3A)	2000*10mV ±0.05% (below 20V) 620*10mA ±0.1%	by far the best value!
Agilent E3645A	yes	35V (60V)	2.1A (1.3A)	78W	\$1717	1mV 4mA	0.01%+3mV	3500*10mV ±0.05% 2100*1mA ±0.15%	similar specs but much lower power, expensive
Agilent E3634A	yes	25V (50V)	7A (4A)	200W	\$2439	0.35mV 2mA	0.01%+2mV	35000*1mV ±0.05% 40000*1mA ±0.15%	same power but more precision all round, even more expensive
Keithley 2420	yes	60V	3A	60W	\$10000	1.5mV (p-p)	0.01%+100µV (load)	200k*300µV ±0.015% 100k*30µA ±0.052%	extremely high precision, extremely high price (but similar looks)
Topward 3306D	no	30V	6A	200W	\$595	0.5mV 1mA (<100W)	0.01%+2mV	300*0.1V ±0.1% 600*0.1A	same power, not programmable, not that much cheaper either

▲ prices correct as of December 2004