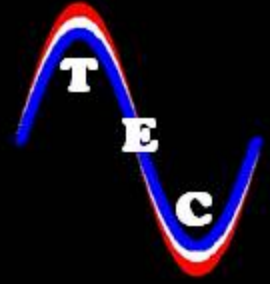


# Tier Electronics

Your Future For Electronics

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



## Universal Power Converter (UPC)

This power converter family is a hand held, open frame converter with very high power densities.

The converter family is offered in a range up to 10 kVA and will work for nearly all AC and DC conversion needs .

PWM frequency as high as 20 kHz.

Controlled by a 40 MHz flash based DSP.

An optional isolated communication module allows asynchronous serial communication.

Built in analog and digital expansion capabilities are used to monitor and control external signals.

Available CAN communications.

Examples of uses for the expansion capabilities:

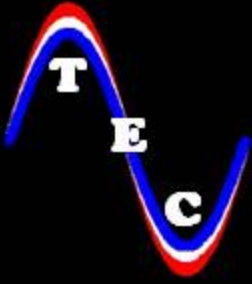
- High speed communications
- Hall sensor feedback from a brushless DC motor
- Status monitoring
- Pre-charge control
- Load control
- AC line voltage monitoring
- External load monitoring
- Battery voltage and current control

### Benefits of the UPC Series:

- Very high power densities
- Standard module building blocks
- Standard as an open frame design
- Optional liquid cooled design
- High reliability design
- Low cost OEM solution
- High volume applications with customized integrated controller

### UPC Uses:

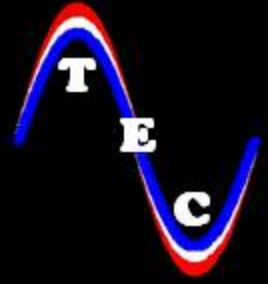
- Conversion Capabilities
  - DC to AC conversion
  - DC to DC conversion
  - AC to DC conversion
  - AC to AC conversion
- Converter Functions
  - Active Rectifiers
  - DC Power Supplies
  - Active Line Conditioners
  - AC Power Supplies
- Industry Applications
  - Mobile Equipment
  - UPS
  - Brushless DC Motor Controller
  - Motor Drives
  - Fuel Cell
  - Micro Turbine Controllers
  - Generator Controllers
  - Welding



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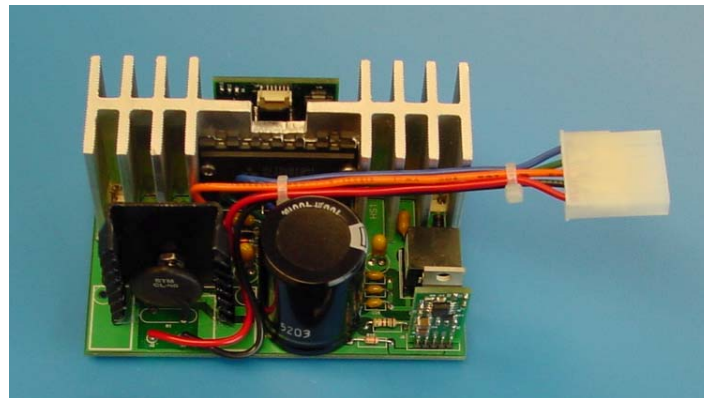


## Universal Power Converter (UPC)

120 / 240 / 480 VAC, 3 Pole, Air Cooled Converters

### Other Advantages Include:

- Quick time to market
- Low cost set-up
- Designs based upon proven technologies
- Programs for many different applications and markets
- Optional custom input/output board capable of adapting to any application
- A low cost open frame design



750 VA Power Converter

### Typical Market Uses:

- Refrigerator
- Washing Machine
- Air Conditioner
- Conveyors
- HVAC
- UPS