Incorporating drake Power & Transformers

AC, DC and Custom Power Supplies

www.powerstax.com

- ISO9001-2015 Certified UK Manufacturing Facility
- Unrivalled Customer Service & Technical Support
- COTS and Custom Design Solutions
- CE, UL, Medical & Military approvals

Powerstax

Incorporating Drake Power® & Drake Transformers®

DC-DC Embedded Power

Encapsulated / Board Mount - 1.5 watts to 500 watts

Our innovative range of market leading high power density, fractional brick DC-DC converters provide up to 500 watts of output power within eighth, quarter and half brick industry standard formats, with available input voltages from 9 V to 350 V and outputs from 3.3 V to 50 V.

High Power Density Full-Bricks - up to 1500 watts

The fully isolated, versatile Powerstax F501 Series of Step-Up and Step down converters, provide users with a comprehensive range of functions, including remote enable, inhibit and sense, together with synchronisation and active current sharing, allowing multiple units to be connected in parallel to increase the overall output power capability. Typical input and output voltages include: 12 V, 24 V, 28 V and 48 V.

Standard Full-Brick packages include units with high voltage input capabilities of between 110 Vdc and 650 Vdc.

Military / Board-Mount - 5 watts to >1000 watts

Powerstax have a long association with applications relating to the defence industry and have a wide range of high reliability military specification DC-DC converters, pre-regulators, EMI filters, transient voltage suppressors and hold-up modules.

Our PX series of DC-DC converters provide reliable operation within the most demanding environments, including Military Aviation and Mission Critical Industrial Applications.

AC-DC Embedded Power

Encapsulated / Board-Mount - 2 watts to 150 watts

Our broad range of AC-DC power modules includes models specifically for ITE and medical applications, with output power ranges from 2 watts to 150 watts and with typical available output voltages from 12 Vdc to 48 Vdc achieving efficiency levels of greater than 90% without forced-air cooling.

Industrial - 45 watts to 960 watts

Both DIN-rail and chassis mount solutions are available, with output voltages from 5 Vdc to 48 Vdc in power ratings from 45 watts to 960 watts. With a universal AC input, level B EMI performance and IP20 ratings, together with battery charging capabilities on some models, these units are ideally suited for a wide range of industrial applications.

Open Frame - 20 watts to 150 watts

These versatile AC-DC and DC-DC open frame units include universal AC inputs and 4:1 DC inputs, respectively. Models are available in single and multiple output versions, with the option of ventilated covers.

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Modular / Configurable - 200 watts to 1340 watts

Our Multistax® series of fully configurable AC-DC power supplies employ an innovative modular architecture with 4 module and 6 module versions available, providing a total power output of 750 watts and 1340 watts respectively. The 'fully floating' output voltage of each module is adjustable and can be connected in series or parallel. Medically Approved Medistax® units together with Ultra Quiet and high temperature (-20 °C to +70 °C) variants are also available.

Powerstax can configure Multistax® and Medistax® units within a 1U 19" rack mountable enclosure for maximum flexibility.

High Power Fanless - 600 watts to 1000 watts

The Cool X series is available in 600 watt and 1000 watt convection cooled and 1800 watt fan assisted versions, all with Industrial and Medical Safety Approvals. Units are available with up to 12 outputs, a 24 Vdc standby power rail and digital PMbus™ for remote signals and controls.

DC-DC Rack-Mount & Discrete Power

MIL STD Ruggedised - 1000 watts

The TVS1001 is a 1000 watt step-up and step down DC-DC converter, developed by Powerstax, specifically for vehicle based harsh environmental conditions. This highly efficient design has a wide input voltage range of 11 Vdc to 36 Vdc and can convert to 24 Vdc, 28 Vdc or 48 Vdc.

MIL STD Ruggedised Hot-Swap - 3000 watts

The TVR3001 is a 3 x 1000 watt 19" x 2U hot swap system utilising the same circuit topology as the TVS1001. Input and output connections to the RTVS1001 rack are via rear panel bus bars.

AC-DC Rack-Mount & Discrete Power

Hot-Swap Front-End - 1600 watts to 9600 watts

These 1U 19" rack mountable units provide up to 2400 watts of output power or 1600 watts with N+1 redundancy. Up to four racks can be stacked directly on top of each other (4U) to provide a total output power capability of 9600 watts. Standard features include an I^2C control interface and a digital display module with voltage adjustment is available as an option.

Front-End Modules - 750 watts & 800 watts

The A0750 & A0800 front-end modules are available with output voltages of 24, 28, 48 & 56.2 Vdc and with output power capabilities of 750 watts & 800 watts respectively. These systems are available with conformal coatings for high humidity environments.

Configurable - up to 3600 watts

Multistax® units can be configured within our A3600 1U 19" rack-mount enclosure to provide either single or multiple outputs, with a total output power capability of up to 3600 Watts. With universal AC input and 1 to 18 isolated and adjustable outputs from 1.45 Vdc to 56 Vdc, the A3600 can be configured to suit a wide range of applications, including series connection of module outputs for higher voltage applications.

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Industrial - 1200 watts to 10000 watts

Our Unistax® series of rugged industrial power supplies provide constant voltage and constant current operational modes as standard, with remote control and monitoring of output voltage and current channels, together with a variety of optional alarms and functions. Achieving up to 90% efficiency in chassis or 19" rack mount versions and with available DC output voltages from 8 Vdc to 200 Vdc, this broad range of versatile and adaptable power supplies are suitable for a wide variety of applications.

Cathodic Protection

Wall-Mount

Powerstax have developed a wide range of Impressed Current Cathodic Protection (ICCP) solutions, providing automatic or manual setting of output current with pre-set voltage limiting via a remote reference electrode which is fixed to the structure being protected. Available with single or three phase ac input, these wall-mounted units are nominally 12 Vdc or 24 Vdc systems, which can be installed within any sized cabinet with ingress protection levels as high as IP65 available. Typical structures for protection include floating production, storage and offloading (FPSOs) pipelines and storage tanks for corrosive liquids.

Floor Standing

Larger transformer rectifier systems are available with Powerstax having produced an impressive range of high power sources for ICCP applications, worldwide. Typical requirements include voltages of up to 100 Vdc and currents up to 1000 A, for protection of large structures, including Oil and Gas platforms and Offshore Wind Farm Turbines.

Transformer Rectifiers

Powerstax acquired Drake Power® in 2012 and with a pedigree stretching back to the 1960s, Drake have earned a global reputation for quality and longevity, particularly within the surface finishing and water treatment sectors. These renowned products with field proven reliability, some units having been operating for 30+ years, are available as primary or secondary controlled designs, with three phase input and output voltages of up to 600 Vdc and output current ratings of up to 5000 A. Our proprietary DTC352 phase angle thyristor controller facilitates full range adjustment of voltages required within any process.

Our extensive library of designs and mechanical formats enable us to provide solutions for a wide range of applications and environments, including hazardous areas. These include positive and negative pressure forced and/or ducted air, fresh or salt water and oil cooling. Mild and stainless steel cabinets in standard or custom sizes are available as wall mounted or floor standing solutions, or built in to existing structures if required; all with paint finishes to the highest specifications.

The Powerstax brand of Drake Transformer® rectifiers can be designed and manufactured to customer specific requirements and can include programmable logic controllers for variable voltage and current profiles, input and output filtering, solenoids and motor controllers to activate pumps, analogue or digital meters, run time indicators, alarms and also remote control & programming protocols.

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Other Products

High Voltage Power - 300 watts to >500 kilowatts

These robust, highly efficient and fully variable HVDC Power Supplies and Capacitor Chargers from **Technix**, are available with standard output voltages of 1 kV to 350 kV in power levels from 300 watts to >500 kilowatts. 'Zero Current Switching' Resonance Technology and a modular design approach, together with a wide range of options, enable design flexibility and fully customised solutions. Front panel 4½ digit displays provide precision readings and RS232, Ethernet, Profibus and Optical remote interfaces, provide remote control functionality.

Programmable DC Power - 1500 watts to >2000 kilowatts

High power density and precision electronics from **Magna-Power**, provide effective and versatile solutions for numerous applications. Standard output Voltages are from 0-5 Vdc up to 0-10 kVdc with output power capabilities from 1.5 kW to > 2000 kW. Programming options include IEEE-488, RS232, RS485, USB and Ethernet. A range of DC Electronic Loads are also available, from 1.5 kW to >500 kW. Full cabinet integration and wiring can be provided by Powerstax and tailored for individual customer requirements, to provide the optimum solution.

Frequency Converters up to 120 kVA

Behlman AC Sources, DC Power Supplies, Frequency Converters, UPS Systems and Inverters, are available through our long-term exclusive UK & Ireland partnership with Behlman Electronics Inc. Variable voltages and frequency levels of 45 Hz – 10 kHz at power levels of up to 120 kVA, enable these robust and innovative products to provide effective solutions for many applications within the Production Test, Research, Oil & Gas exploration, Transportation, Aerospace and Defence sectors.

Telecom Power up to 500 kilowatts

A broad range of standard and fully customisable DC power systems and industrial battery chargers from **Enatel Energy**, provide flexibility and scalability, by way of rack mount, hot-pluggable combinations of modular AC-DC Rectifiers and DC-DC converters. Advanced monitoring and control functions, together with power capabilities of up to 500 kW, provide effective solutions for all DC power requirements.

Linear & Form, Fit, Function - 15 watts to 2500 watts

Powerstax manufactures direct replacements and alternatives for **Kingshill** linear, regulated and un-regulated DC power supplies. We are able to provide form fit and function replacements for **Kingshill** and discontinued ranges from other manufacturers. These practical and cost effective alternatives, enable quick and simple replacement of existing installations, thereby, minimising costly engineering intervention and ensuring continuity of supply. We are able to solve your most demanding power applications and reverse engineering requirements, with reliable, high quality products, personal service and prompt delivery.

High Current Rectifiers - 3000 watts to >2000 kilowatts

These versatile high current switched mode rectifiers from **Kraft Powercon** utilise ground breaking technology to achieve long-term reliability within the most demanding environments. Their modular construction facilitates an upgradable output power capability and full serviceability. Air and water-cooled variants provide both marine and land-based solutions for: Water Treatment, Cathodic Protection, Anodising, Electro-Plating and many other Electro-Chemical processes. Standard models are available as either dual or single outputs, with maximum current levels of up to 6000 amps and with numerous controllable parameters via the front panel HMI and Analogue or Digital remote interfaces.

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About Powerstax

- **Established 1992 with Drake acquisition in 2012**
- **UK Engineered Solutions**
- **Fast and Flexible**
- **UK & Asia Manufacture**
- **Unrivalled Customer Service**

Powerstax, incorporating the Drake Power® and Drake Transformer® brands, provides an efficient, reliable unrivalled customer service and technical support for a broad range of products and capabilities, through a variety of standard formats and custom design capabilities, aided by our extensive design library accumulated over many years, together with an engineering team possessing a wide application knowledge and a thorough understanding of power engineering principles.

Powerstax specialises in the design, manufacture and marketing of AC-DC and DC-DC power supplies, including DC-DC converters and configurable, modular SMPS, together with transformer rectifiers and bulk power PSUs. We provide ac & dc power solutions for centralised and distributed power in a broad range of applications, including: Hot-Swap front end AC-DC bulk power, DC-DC converter bricks and programmable, modular rack mounted SMPS. Core markets include Defence, Military Vehicles, Aerospace, Aviation, Medical, Industrial, Automotive, Marine, Cathodic Protection and Water Treatment.

In addition, Powerstax provides value added and complete custom power solutions; the wide ranging experience of our engineering team in power design (including thermal, mechanical and EMC/EMI) incorporating an extensive library of proven designs and CAD tools, enables the rapid design and realisation of custom power solutions, from several Watts to Kilowatts.

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