Configurable Digital Programmable Power Supplies

**Key features**
- Full medical approval to EN60601-1 Type B
- Intelligent I2C control
- Configurable current share on all outputs > 10 A
- Voltage adjustment on all outputs - manual or via I2C
- Configurable ac OK and dc OK signals & indicators
- Configurable inhibit/enable
- Configurable output up/down sequencing
- Intelligent fans - speed control/fault status
- Customer-provided air option
- Processor-controlled PFC input with active inrush protection
- I2C monitoring of voltage, current & temperature (IPMI-compliant)
- Programmable voltage, current limit & inhibit/enable via I2C
- Optional extended power hold-up module (SEMI F47-compliant)

**Suitable application areas**
- Medical and laboratory equipment
- Test and instrumentation
- Telecommunications
- Production and process control
- Military and aerospace
- Data storage systems

**Flexible digital power**, Just another reason why Emerson Network Power is the global leader in enabling Business-Critical Continuity™.

- AC power
- Connectivity
- DC Power
- Embedded Computing
- Embedded Power
- Monitoring
- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

**Emerson Network Power**

**Key sales and marketing facilities**
- USA: Carlsbad, California
- UK: Dudley, West Midlands
- The Netherlands: Ede
- Germany: Augsburg
- Italy: Milan
- China: Hong Kong
- Japan: Tokyo

**Sales support**
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- Europe (UK): +44 (0) 1384 842 211
- Asia (HK): +852 2176 3333

**Technical support**
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**www.powerconversion.com/imp**

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Emerson Network Power’s iMP™ digitally programmable modular ac-dc power supplies are the last word in flexibility. Flexibility that you need every time you specify, commission or replace a power supply.

Gone are the times when multi-output fixed-function power supplies made sense. Today’s short design-to-manufacture timescales, narrow market windows and whole-life cost reduction goals demand adaptability at all levels - especially in power provision.

iMP power supplies are modular and digitally programmable. You can configure the ideal unit of your choice - and even change your mind later, to accommodate unforeseen or new power requirements. Then you can set it up to do exactly what you want, when you want, via an easy-to-use PC-based GUI.

- 6 types of power module - including single, dual & triple output units
- 25 standard output voltages, from 2 Vdc to 60 Vdc
- Up to 1,500 watts & 21 separate outputs from one power supply
- Optional power hold-up and Oring modules
- Full medical approval to EN60601-1 Type B
- Advanced PMBus™ digital monitoring & control functions

Intelligent digital control

All iMP ac-dc power supplies are fully programmable. Both the case and the individual power modules feature integral microcontrollers to maximize control flexibility. And all communication between the host controller and the power supply is handled via I2C bus, using the standard PMBus protocol.

The control software supplied with every iMP power supply runs under Windows® on any standard PC, using Microsoft’s .NET™ framework. It uses a highly intuitive, easy-to-use graphical user interface.

Setting-up an iMP power module could not be simpler. The same control screen is used for all modules and all operating parameters. So as well as defining a module’s output voltage and current, you can just as easily adjust its OVP, UVP and OTP limits, change its OCP mode and control signal, and force fan speed override if required. All with clear on-screen confirmation and feedback.

Configuration made easy

Output module line-up

<table>
<thead>
<tr>
<th>Module code</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>4</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module type</td>
<td>Single</td>
<td>Single</td>
<td>Single</td>
<td>Single</td>
<td>Dual</td>
<td>Triple</td>
</tr>
<tr>
<td>Max output power</td>
<td>210 W</td>
<td>360 W</td>
<td>750 W</td>
<td>1,500 W</td>
<td>144 W</td>
<td>36 W</td>
</tr>
<tr>
<td>Max output current</td>
<td>35 A</td>
<td>60 A</td>
<td>150 A</td>
<td>140 A</td>
<td>10 A</td>
<td>2 A</td>
</tr>
<tr>
<td>Output voltages available</td>
<td>2-60 V</td>
<td>2-60 V</td>
<td>2-60 V</td>
<td>6-60 V</td>
<td>2-28 V</td>
<td>2-28 V</td>
</tr>
<tr>
<td>Standard voltage increments</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Remote sense</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Remote margin</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Voltage programming - I2C control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Active current share</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Module inhibit - I2C control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Module inhibit - analog</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Overvoltage/overcurrent protection</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum load required</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Slots occupied in any iMP case</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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Output module line-up

Real-time monitoring

iMP control software offers exceptionally powerful real-time monitoring facilities. A single screen conveys all status information, to provide at-a-glance performance confirmation for the entire power supply, including the case and all its constituent modules. The monitoring screen displays correlated functions as sub-panels to ensure easy, unambiguous visual interpretation.

You can monitor data numerically and graphically - at the same time, if you wish. The graphical display uses color-coded analog-style presentations to show the voltage, current and temperature of individual modules, as well as fan speed.

Configuration flexibility

Totally modular in design, iMP power supplies provide you with unsurpassed configuration flexibility. There is a choice of 25 different output voltages, from 2 Vdc to 60 Vdc. As well as single, dual and triple output modules, and six different power ratings. There is even an optional power hold-up module to increase voltage sag ride-through time. Configuring the power supply of your choice has never been easier.

Specify iMP power supplies and gain the last word in flexibility.