# Configurable Digital **Programmable** Power Supplies











### **Kev features**

- Full medical approval to EN60601-1 Type B
- Intelligent I<sup>2</sup>C control
- Configurable current share on all outputs > 10 A
- Voltage adjustment on all outputs manual or via I<sup>2</sup>C
- 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
- I<sup>2</sup>C monitoring of voltage, current & temperature (IPMI-compliant)
- Programmable voltage, current limit & inhibit/enable via I<sup>2</sup>C
- 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  $\mathbb{T}^{\mathbb{N}}$ .

- AC power
- Connectivity
- DC Power
- Embedded Computing Embedded Power
- Monitorina

- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

### **Emerson Network Power**

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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 multioutput 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.

*i*MP power supplies are modular and digitally programmable. You can configure the ideal unit of vour 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-touse PC-based GUI.

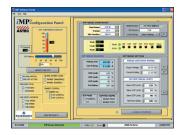
- 6 types of power module including single, dual & triple output units
- 25 standard output voltages, from 2 Vdc to 60 Vdc
- Up to 1.500 watts & 21 separate outputs from one power supply
- Optional power hold-up and Oring modules
- Full medical approval to EN60601-1 Type B
- Advanced PMBus<sup>™</sup> 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 I<sup>2</sup>C bus, using the standard PMBus protocol.

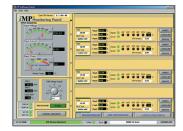
The control software supplied with every *i*MP power supply runs under Windows® on any standard PC, using Microsoft's .NET™ framework. It uses a highly intuitive, easy-to-use graphical user interface.

### Configuration made easy



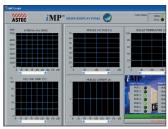
Setting-up an iMP power module could not be simpler. The same control screen is used for all modules and all operating parameters. So as well as defining a module's output voltage and current, you can just as easily adjust its OVP, UVP and OTP limits, change its OCP mode and control signal, and force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

### Real-time monitoring



*i*MP control software offers exceptionally powerful realtime 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.

\* Programmable



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

# Output module line-up

Module code	1	2	3	5	4		None		
Module type	Single	Single	Single	Single	Dual		Triple		
Max output power	210 W	360 W	750 W	1,500 W	144 W		36 W		
Max output current	35 A	60 A	150 A	140 A	10 A		2 A		
Output voltages available*	2-60 V	2-60 V	2-60 V	6-60 V	2-28 V	2-28 V	8-15 V	8-28 V	2-28 V
Standard voltage increments	25	25	25	20	19		18		
Remote sense	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Remote margin	Yes	Yes	Yes	Yes	No	No	No	No	No
Voltage programming - I <sup>2</sup> C control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Active current share	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Module inhibit - I <sup>2</sup> C control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Module inhibit - analog	Yes	Yes	Yes	Yes	No	No	No	No	No
Overvoltage/overcurrent protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum load required	No	No	No	No	No	No	No	No	No
Slots occupied in any iMP case	1	2	3	4	1		1		

## 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 ridethrough time. Configuring the power supply of your choice has never been easier.

