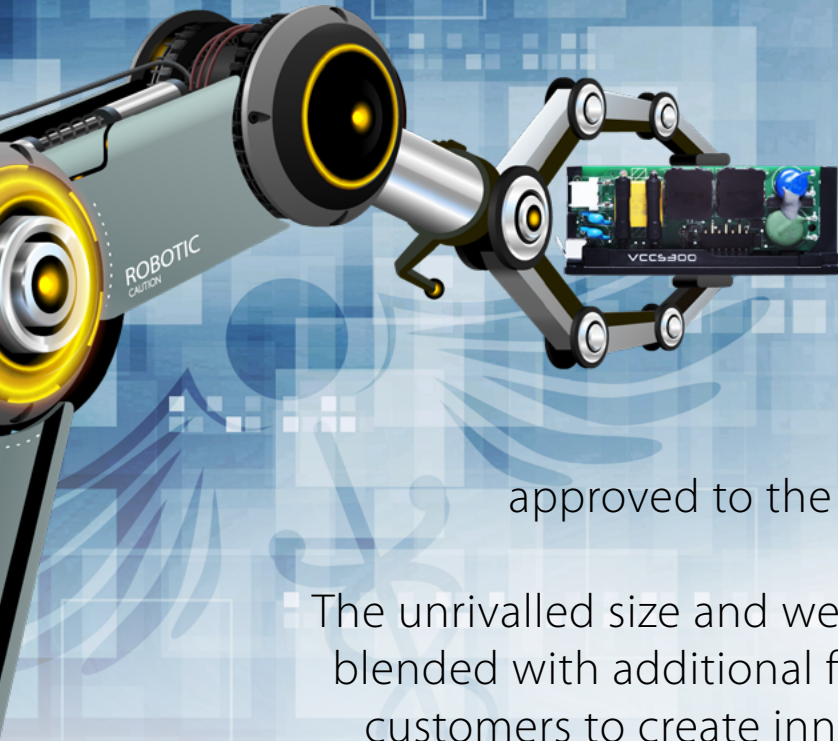




LET **VOX POWER** YOU

Unique Power Solutions.

We design and manufacture unique AC/DC and DC/DC power solutions for demanding medical, industrial and technology markets, empowering our customers to change the world.



We offer a comprehensive range of modular and fan-less conduction cooled power solutions for a broad range of applications with all products approved to the latest ITE and medical standards.

- The unrivalled size and weight advantages of our products, blended with additional functionality and features, enable customers to create innovative, smaller and aesthetically pleasing and highly efficient end solutions.

## HIGH-DENSITY MODULAR AND FAN-LESS CONDUCTION COOLED AC/DC AND DC/DC POWER SOLUTIONS FOR DEMANDING MEDICAL, INDUSTRIAL AND TECHNOLOGY APPLICATIONS

MODULAR AND USER CONFIGURABLE

**300W**  
VCCR300  
DC/DC

**300W**  
VCCS300  
AC/DC

**600W**  
VCCM600  
AC/DC

**600W**  
NEVO+600  
AC/DC

**1200W**  
NEVO+1200  
AC/DC

FAN-LESS AND CONDUCTION COOLED

The VCCR300 is a robust and highly reliable single output conduction cooled power supply delivering up to 300 Watts in a compact 7.43" x 4.6" package. Its unrivalled 1" low profile, ensures easy integration in virtually any orientation, providing system designers great flexibility and space saving advantages. The series offers a wide DC input range of 33.6-160V<sub>DC</sub>.

The VCCS300 is a scalable single output conduction cooled power supply. It is the ultimate power solution for Class I and II applications where rugged reliability, high efficiency, silent operation and BF rating are important factors. The series delivers 300 Watts of continuous output power in a rugged and miniature 4" x 2" x 1.61" package.

The VCCM600 conduction cooled configurable power series combines the advantages of a modular power supply with the high reliability of a fan-less architecture and offers unrivalled performance and flexibility. The series delivers a silent 600 Watts, and up to 750 Watts of peak output power for 5 seconds, in a rugged 4" x 7" x 1.61" package.

The NEVO+ modular and user-configurable series is the smallest in their class and the ultimate power solution for demanding applications where size, power density and weight are vital factors. It offers multiple output voltages and power options that can be configured in minutes to suit virtually any application. Customers can choose from a variety of output modules to provide up to 16 isolated outputs to meet the exact requirement of the application. The NEVO+600 delivers 600 Watts from a tiny 5" x 3" x 1.61" package weighing 600g and the NEVO+1200 delivers 1200 Watts from a 6" x 6" x 1.61" package weighing 1.2kg when fully configured.

# VCCR300

## Single Output Conduction Cooled DC/DC Power Series

7.43" x 4.6" x 1"

Low profile

300W | 600W | 900W

Scalable

33.6-160V<sub>DC</sub>

Wide input voltage range

Fan-less

Reliable



## Ruggedised for long term reliability

The VCCR300 conduction cooled power series is a robust and highly reliable DC/DC power supply capable of delivering up to 300 Watts in a compact size measuring only 7.43" x 4.6". Its unrivalled 1" low profile, ensures easy integration in virtually any orientation, providing system designers great flexibility and space saving advantages.

The series provides a broad DC input voltage range, catering to standard 48V, 72V, 96V, and 110V railway battery requirements as outlined in EN50155. Its high-efficiency design minimises heat output, yielding a wide operating temperature range of -40°C to +70°C (+85°C for 10 minutes) with minimal cooling requirement. It offers standard output voltages of 12V, 24V, 36V, and 48V, all of which also feature a wide adjustment range of 90% to 125%. Protections include over-voltage, over-current and over-temperature are provided while DC\_OK and warning signals indicate the status of the power supply.

Higher power solutions of 300 Watts, 600 Watts, 900 Watts and beyond can be achieved by using the onboard droop current share function, which allows end users to scale up or down depending on their power requirements while sharing the power load equally between each 300W product.

The series meets the requirements of the latest railway standards (EN50155), MIL-STD-810G (Shock & Vibration) and is approved to the latest industrial safety standards (IEC/UL62368-1 3<sup>rd</sup> Edition). EMC emissions and immunity exceed the requirements of EN50121-3-2, EN55035 and EN55032 class B.

### STANDARD FEATURES

- 300 Watts output
- Small 18,87 x 11,68 x 2,54 cm low profile
- Fan-less conduction cooled
- High reliability - calculated MTBF exceeding 2M HRS
- High efficiency - up to 94%
- Scalable power architecture
- Wide input voltage range (33.6V<sub>DC</sub>-160V<sub>DC</sub>)
- Standard output voltages of 12, 24, 36 & 48
- Adjustable output voltage (90% to 125%)
- Holdup as standard (10mS 300W)
- Operating altitude up to 4000m
- Wide operating temperature range (-40°C to +70°C)
- Low no-load & standby power
- Programmable undervoltage protection
- Low inrush current
- Extensive protections & system warnings
- Remote shutdown
- Protective conformal coating
- Output current measurement signal
- Silent operation
- Low EMC emissions (EN55032:2020 Class B)
- MIL-STD-810G (Vibration & Shock)
- 5 year warranty
- Approved to latest safety standards: IEC62368-1:2018 (Industrial Safety) EN50155-1:2021 (Railway General) EN50121-3-2:2019 (Railway EMC) EN45545 (Railway Fire Protection)

### SPECIFICATIONS

DC input voltage	33.6 – 160 V <sub>DC</sub>
Size	7.43" x 4.6" x 1"
Power Rating	300 Watts
Efficiency	Up to 94%
Holdup	12mS @300W 20mS @180W
No load power	≤ 1.5 Watts
Operating temperature	-40°C to +70°C
Output voltages	10.8V to 60V



Datasheet

[VIEW MORE](#)

# VCCS300

Single Output Conduction Cooled AC/DC Power Series

4" x 2" x 1.61"

Small

300W | 600W | 900W

Scalable

Fan-less

Silent

BF-Rated

Output



## Fan-less conduction cooled 300W scalable power

The VCCS300 conduction cooled series delivers a silent 300 Watts of continuous output power in a rugged and miniature 4" x 2" x 1.61" package. It is the ultimate power solution for applications where rugged reliability, high efficiency, silent operation and BF rating are important factors.

This product series offers power densities exceeding 23W/in<sup>3</sup> with efficiencies up to 95% in a scalable power architecture. Power solutions of 300 Watts, 600 Watts, 900 Watts and beyond can be achieved by using the onboard droop current share function, which allows end users to scale up or down depending on their power requirements.

The VCCS300 is certified to the latest international Medical (BF rated) and ITE Safety Standards. The series offers a range of standard and value-add (on request) output solutions ranging from 12 to 58V<sub>DC</sub>, saving system designers cost and valuable time. The product is suitable for class I or II equipment up to 5000m and carries various Immunity and MIL STD approvals, making it perfect for applications in rugged and high vibration environments.

### STANDARD FEATURES

- 300 Watts output
- 10,16 x 5,08 x 4,09 cm package
- Fan-less conduction cooled
- Scalable power architecture
- High efficiency – up to 95%
- High reliability
- Class I or II installations
- Parallel units with droop current sharing
- Low no-load power consumption
- Standard outputs 12, 15, 24, 28, 36, 48, 56V<sub>DC</sub>
- Fully safety approved & value-add solutions from 12 to 58V<sub>DC</sub> on request.
- Operating altitude up to 5000m
- Low leakage & touch current
- BF rated output
- Best-in-class EMC performance
- Silent operation
- SEMI F47, MIL-STD 810G, MIL-STD 461F & MIL-STD 704F compliant
- 5 Year warranty
- Approved to latest safety standards: IEC/UL62368-1 2<sup>nd</sup> & 3<sup>rd</sup> Edition IEC/UL60601-1 3.2 Edition IEC/UL60601-1-2 4<sup>th</sup> Edition (EMC)


### SPECIFICATIONS

AC input voltage	85 – 264 Vrms
Size	4" x 2" x 1.61"
Power Rating	300 Watts
Efficiency	Up to 95%
Power Factor	0.99
Holdup	16mS
No load power	≤ 1 Watts
Operating temperature	-40°C to +70°C
Leakage & touch current	≤200uA
Output voltages	12V to 58V

[VIEW INDUSTRIAL](#)

[VIEW MEDICAL](#)

 Industrial datasheet

 Medical datasheet



# VCCM600

## Modular Conduction Cooled AC/DC Power Series

4" x 7" x 1.61"

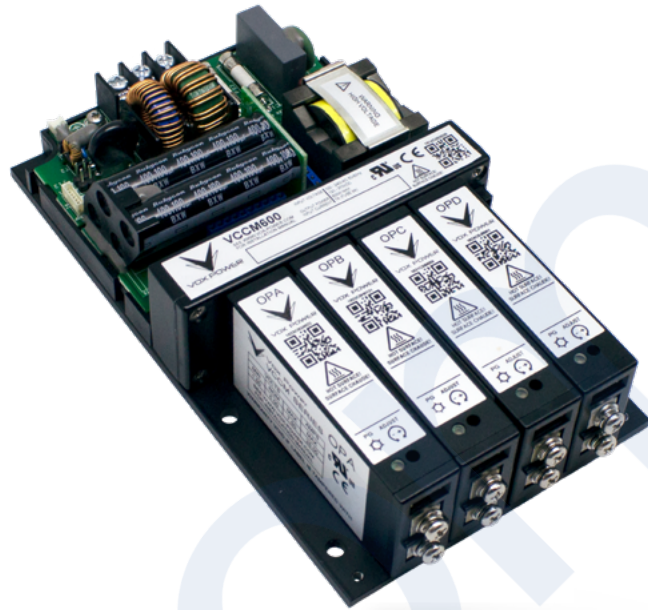
Small

600W

Powerful

Fan-less

Silent



## Flexibility meets reliability - modular & fan-less

The VCCM600 conduction cooled configurable power supply series combines the advantages of a modular power supply with the high reliability of a fan-less architecture and offers unrivalled performance and flexibility. The power supply delivers a silent 600 Watts, and up to 750 Watts of peak power for 5 seconds, in a rugged 4" x 7" x 1.61" package. It is the ultimate power solution for demanding medical, industrial, lighting and military applications where reliability, multiple output voltages, user controllable functions and audible noise are of utmost concern.

The series can accommodate up to 4 isolated DC output modules with outputs from 1.5 to 58V<sub>DC</sub> at 150 Watts per channel. Each output module is produced using 100% SMT components to ensure minimal touch which in turn ensures long term reliability. Each VCCM600 series module can be connected in parallel or series to achieve higher power or voltage levels which can be controlled using the on-board signal functionality.

The VCCM600 series unique design approach and heat dissipation techniques allow the unit to be mounted in virtually any orientation giving system designers greater flexibility. The series is compliant with multiple military shock and vibration standards, complies with Semi-F47 and is still the only modular conduction cooled power solution available in the market.

### STANDARD FEATURES

- 600 Watts in a 10,2 x 17,8 x 4,1 cm package
- Fan-less conduction cooled
- 750 Watts peak rating (5 seconds)
- Standby power  $\leq$  1Watts (In primary inhibit mode)
- Efficiency up to 92%
- Unique module design (100% SMT)
- Up to 4 isolated outputs at 150 Watts per channel
- Wide output adjust range
- Voltage and current dynamically controllable
- 5V/1A bias supply
- Instant fully safety approved power solutions based on proven technology
- Accurate current sharing
- Series and paralleling of outputs
- Programmable start-up state (laser applications)
- Remote current/voltage programming
- Selective conformal coating
- SEMI F47, MIL-STD 810G, MIL-STD 461F & MIL-STD 704F compliant
- 5 year warranty
- Approved to latest safety standards: IEC/UL62368-1 2<sup>nd</sup> & 3<sup>rd</sup> Edition IEC/UL60601-1 3.2 Edition IEC/UL60601-1-2 4<sup>th</sup> Edition (EMC)

### SPECIFICATIONS

AC input voltage	85 – 264 Vrms
Size	4" x 7" x 1.61"
Power Rating	600 Watts 750 Watts Peak
Efficiency	Up to 92%
Power Factor	0.99
Holdup	20mS
Standby power	$\leq$ 1 Watts
Baseplate operating temperature range	-40°C to +105°C, (Derating above +85°C)
Ambient operating temperature	-40°C to +70°C, (Derating above 50°C)
Input leakage current	$\leq$ 1500uA (Industrial) $\leq$ 300uA (Medical)
Touch current	$\leq$ 100uA

### OUTPUT OPTIONS

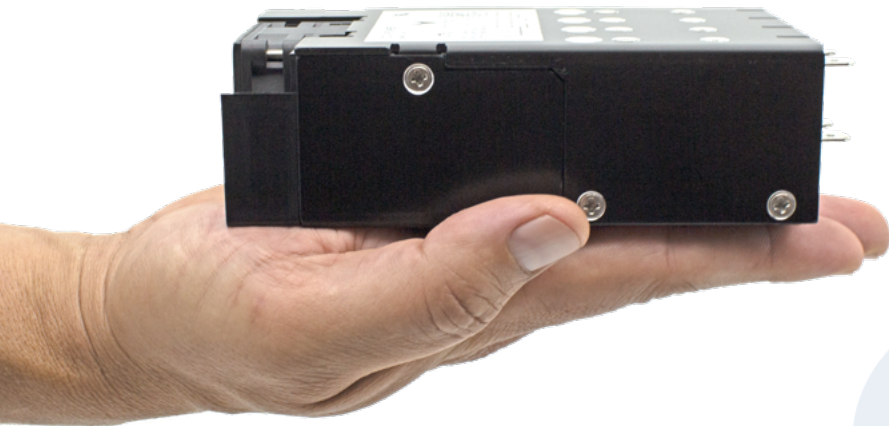
OPA	1.5V-7.5V, 25A, 125W
OPB	4.5V-15V, 15A, 150W
OPC	9V-30V, 7.5A, 150W
OPD	18V-58V, 3.75A, 150W

[VIEW INDUSTRIAL](#)

[VIEW MEDICAL](#)

# NEVO+600

Modular Configurable AC/DC Power Series



5" x 3" x 1.61"

Small

600g

Light

600W

Powerful

## 600 Watts in the palm of your hand

The innovative NEVO+600 configurable power supply series is the smallest in its class, the ultimate power solution for demanding industrial and medical applications where size, power density and weight are vital factors. Weighing only 600 grams, the compact 5" x 3" x 1.61" package delivers up to 600 Watts, equating to a power density of 25 Watts per cubic inch.

The NEVO+600 input module can accommodate up to four isolated output modules, ranging from 75 Watts dual output to 150 Watts or 300 Watts single output, which can easily be configured into a high power 5" x 3" single output power supply or a multiple output power supply with up to eight isolated outputs.

Standard features include intelligent fan control providing optimised airflow for various load and temperature conditions, wide output voltage adjust capability, parallel and series connection of modules and an isolated 5V 1A bias supply. A low noise fan option is available for use in even the quietest of environments.

### STANDARD FEATURES

- 600W in 12,7 x 7,6 x 4,1 cm, 25W/in<sup>3</sup> (only 600g)
- User and field configurable
- Wide output voltage adjust range
- Remote current/voltage programming
- Constant current and voltage operation
- Efficiency up to 90%
- Intelligent fan control
- Parallel and series connection of modules
- Accurate current sharing
- Instant fully safety approved power solutions based on proven technology
- Up to 8 isolated outputs
- 300W dual slot output modules
- Standard 5V 1A bias supply
- Low noise fan option
- Series tracker and I2C options
- 24-hour samples from distribution
- 3 Year Warranty
- Approved to latest safety standards: IEC/UL62368-1 2<sup>nd</sup> & 3<sup>rd</sup> Edition IEC/UL60601-1 3.2 Edition IEC/UL60601-1-2 4<sup>th</sup> Edition (EMC)

### SPECIFICATIONS

AC input voltage	85 – 264 Vrms
Size	5" x 3" x 1.61"
Power Rating	600 Watts
Efficiency	Up to 90%
Power Factor	0.99
Holdup	20mS
Ambient operating temperature	-20°C to 70°C (Derating above 50°C)
Input leakage current	≤1500uA (Industrial) ≤300uA (Medical)
Touch current	<100uA


### OUTPUT OPTIONS

OP1	1.5V-7.5V, 25A, 125W
OP2	4.5V-15V, 15A, 150W
OP3	9V-30V, 7.5A, 150W
OP4	18V-58V, 3.75A, 150W
OP5	Dual 3.3V-15V, 5A, 2 x 75W
OPA2	4.5V-15V, 25A, 300W Dual Slot
OPA3	9V-30V, 15A, 300W Dual Slot

 Industrial datasheet

 Industrial low noise datasheet

 Medical datasheet

 Medical low noise datasheet

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[VIEW MEDICAL](#)

# NEVO+1200

Modular Configurable AC/DC Power Series

6" x 6" x 1.61"

Small

1.2kg

Light

1200W

Powerful



## The ultimate 1200W configurable solution

The NEVO+1200 configurable power supply series is the smallest in its class, delivering up to 1200 Watts from a 6" x 6" x 1.61" package weighing only 1.2kg when fully configured. The ultimate power solution for demanding industrial and medical applications where size, weight, low standby power and primary side inhibit are vital factors.

Each configured NEVO+1200 consists of an input module with up to eight output modules ranging from 75 Watts dual output to 300 Watts single output. These outputs can be fitted without restriction in any combination to create a power solution with up to sixteen isolated outputs. A low noise fan option is available for use in even the quietest of environments. A wide range of accessories are also available to simplify system integration.




The NEVO+ series 300W dual slot output modules increases reliability and reduces overall system complexity and cost.


### STANDARD FEATURES

- Up to 1200W in 15,2 x 15,2 x 4,1 cm, 21W/in<sup>3</sup>
- Lightest modular design - only 1.2kg - 1000 W/kg
- User and field configurable
- Efficiency up to 90%
- Primary side remote on/off function
- Remote current / voltage programming
- Constant current and voltage operation
- Wide output voltage adjust
- Standby power ≤ 3 Watts
- Intelligent fan control
- Instant fully safety approved power solutions based on proven technology
- Parallel & series connection of modules
- Up to 16 isolated outputs
- Accurate current sharing
- 2 x 5V 1A bias supply
- Low noise fan option
- Series tracker and I2C options
- Field replaceable
- 3 year warranty
- Approved to latest safety standards: IEC/UL62368-1 2<sup>nd</sup> & 3<sup>rd</sup> Edition IEC/UL60601-1 3.2 Edition IEC/UL60601-1-2 4<sup>th</sup> Edition (EMC)

 Industrial datasheet

 Industrial low noise datasheet

 Medical datasheet

 Medical low noise datasheet

### SPECIFICATIONS

AC input voltage	85 – 264 Vrms
Size	6" x 6" x 1.61"
Power Rating	1200 Watts
Efficiency	Up to 90%
Power Factor	0.99
Holdup	20mS
Ambient operating temperature	-20°C to 70°C (Derating above 50°C)
Input leakage current	≤1500uA (Industrial) ≤300uA (Medical)
Touch current	≤100uA

### OUTPUT OPTIONS

OP1	1.5V-7.5V, 25A, 125W
OP2	4.5V-15V, 15A, 150W
OP3	9V-30V, 7.5A, 150W
OP4	18V-58V, 3.75A, 150W
OP5	Dual 3.3V-15V, 5A, 2 x 75W
OPA2	4.5V-15V, 25A, 300W Dual Slot
OPA3	9V-30V, 15A, 300W Dual Slot

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