

New Power

TDK-Lambda Power Supply Highlights



The heart of your application

At TDK-Lambda, a "Power Supply" is more than just an electronic device. It is the "heart" of our customers' systems and the core element of safety and reliability.

Since 1948 as a leading global manufacturer we have been developing and producing innovative and highly reliable power supplies for a wide spectrum of applications. In addition, with our unique range of activities from research and development through to manufacturing, sales and service, our customers appreciate

our experience, know-how and our passion for always wishing to find the best solution for our customers. This short brochure will provide you with an overview of our newest power supplies.

www.emea.lambda.tdk.com





Discover our newest Highlights

We offer innovative and reliable power supplies for a wide spectrum of industrial and medical applications. Like all TDK-Lambda power supplies these models meet the highest criteria for quality and reliability.

AC-DC

MU4 – 600W/800W 1U Modular Power Supply

CUS250M – single output 2x4 inch AC-DC power supply

PFH500F – 504W AC-DC power module

CUS500M1 – 3 x 5" 500W single output AC-DC power supplies

DRB 3 Phase Series – 120/240/480/960W DIN-Rail power supplies

DBM20 Series - 24Vdc 20A DIN-Rail mount buffer module

CUS400M – 3 x 5" 400W medical AC-DC power supplies

CUS600M – 3 x 5" 600W medical AC-DC power supplies

Programmable

GENESYS[™] 7.5kW – 7.5kW in 1U Height, 19 inch

GENESYS[™] Fast-Speed Models – 1.7kW/3.4kW/5kW – 20V/30V/40V in 1U, 19 inch

GENESYS™ GSPS – configurable solutions 30kW/45kW/60kW 20U, 19 inch rack cabinet

GENESYS[™] GSPL – 15kW in 2U, 22.5kW in 3U, 19 inch

DC-DC

PYH200 – 200W, ½ brick, PCB mount, DC-DC converter isolated

PXD40/60 – 40W, 60W single and dual output DC-DC converters

CCG new – 1.5 and 3W DC-DC converters

i7A – 750W, 18 to 60V input non-isolated step down DC-DC converters

i7C – 300W, 9-53V input, buck-boost non-isolated DC-DC converters

DDA – 250 to 500W wide range, non-isolated DC-DC converters

TDK·Lambda



MU4

600W/800W 1U Modular Power Supply



Features	Benefits
Extremely low audible noise – fan cooled	Reduced patient/operator disturbance
B & BF ready medical isolation including output to earth (Full MOPP)	Eases design into medical systems
Up to 4 outputs plus 1 standby	Eliminates need for additional power supplies, reducing required system space
PMBus [™] communication option	Remote monitoring and control
Class B compliant to EN55055 & 60601-1-2	Known, certified EMC performance
Output inhibit and enable options	Flexible system operation
1U height	Industry standard rack mountable
7 year warranty	Low cost of ownership

Model	Output power	Number of outputs	Output voltage	Input voltage	Standby supply	Cooling
MU4	600 - 800W	1-5	3.3-104Vdc	85-264Vac	Optional 5V	⊗ &











CUS250M

Single output 2x4 inch AC-DC power supply



Features	Benefits
Up to 250W utilizing convection or conduction cooling	Quiet operation
Operation in ambient temperatures of up to 85°C	Suitable for high ambient temperature environments
Medical certifications (2 x MOPP)	Suitable for B and BF type medical equipment
Class B conducted and radiated EMI	Easier system EMC compliance
Suitable for Class I and Class II installations	Flexible utilisation
Compact 2 x 4 x 1.56"/50.8 x 101.6 x 39.5mm size	Space saving in end equipment
Enclosure & Cooling options	Versatile application

Model	Output power	Output voltage	Input voltage	Size	Mechanical format	Cooling
CUS250M	250W	12, 24Vdc	85 – 264Vac	2 x 4"	Open frame, baseplate, U-channel, enclosed, enclosed with top fan	◇ ♥ ② @
CUS250M coming soon	250W	15, 18, 28, 36, 48Vdc	85 – 264Vac	2 x 4"	Open frame, baseplate, U-channel, enclosed, enclosed with top fan	◇ ♥ ֎ @













PFH500F

504W AC-DC power module



Features	Benefits		
Compact 4" x 2.4" x 0.53" brick package	Less board area required		
Metal case	Easier thermal management and lower radiated EM		
High power density, high efficiency	Less waste heat to manage and reduced AC power consumption		
100°C rated baseplate temperature	Cold plate / conduction cooling for fanless and rugged environments		
PMBus™ interface	Remote monitoring and programming via i ² C		
Optional droop mode load sharing	Simplified paralleling for higher power or redundant applications		

Model	Output power	Output voltage	Input voltage	Size	Cooling
PFH500F	504W	12, 28, 48Vdc	85 - 265Vac	4 x 2.4 x 0.53"	<u> </u>









CUS500M1

3 x 5" 500W single output AC-DC power supplies



Features	Benefits
300W (500W Peak) convection cooled	Quiet operation
500W with forced air	Can utilise system airflow or integrated fan
Medical certifications (2 x MOPP)	Suitable for B and BF type medical equipment
Class B conducted and radiated EMI	Easier system EMC compliance
Suitable for class I and class II installations	Flexible utilization
Compact 3 x 5 x 1.46" size	Space saving in end equipment
Enclosure and end fan models	Versatile application

Model	Output power	Output voltage	Input voltage	Size	Mechanical format	Cooling
CUS500M1	500W	12, 19, 24, 28, 32, 36, 48Vdc	85 - 265Vac	3 x 5 x 1.46"	Open frame, Enclosure with fan	⋄ •











DRB 3 Phase Series

120/240W DIN-Rail power supplies 480/960W DIN-Rail power supplies COMING SOON





Efficient design for conventional mechanical and plant engineering.

Features	Benefits
Wide 3 phase input range	For global mains voltages
Boost current of up to 150% for 5s	Support capacitive loads start-up
Smart Hiccup behaviour in short-circuit situation	Avoids self-heating
Parallel mode switch	Activates load balancing behaviour
Two means of transient protection	Increase process stability
Fast OVP control	Protects sensitive loads
Very low inrush energy peak (I2t)	Saves cost for input line protection
Screw or push-in terminals available	Serve individual connection needs
High efficiency and low stand-by losses	Offers an eco-friendly energy footprint
Strong CC overload behaviour	Secures process reliability under demanding load conditions
DC-OK and inhibit relay contacts	For professional integration into applications control architecture

Model	Output power	Output current	Output voltage	Input voltage	Terminal type (XX)
DRB120-12-3-XX	120W	10A	12VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB120-24-3-XX	120W	5A	24VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB240-24-3-XX	240W	10A	24VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB240-48-3-XX	240W	5A	48VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB480-24-3-XX	480W	20A	24VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB480-48-3-XX	480W	10A	48VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB480-72-3-XX	480W	6.7A	72VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB960-24-3-XX	960W	40A	24VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB960-48-3-XX	960W	20A	48VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)
DRB960-72-3-XX	960W	13.3A	72VDC	3x350575VAC	Screw terminals (-A0) / Push-in terminals (-A1)







NEW RANGE

DBM20 - Series

24Vdc 20A DIN-Rail mount buffer module



The DBM module is ideal for providing short term hold-up or peak power for loads connected to a 24Vdc output AC-DC power supply. It can supply an additional 250ms hold-up at 448W output power.

Features	Benefits		
Provides 250ms additional hold-up time at 448W	Avoids data loss during AC power dips		
Utilizes electrolytic capacitors to store energy	No batteries to service or maintain		
Narrow 49mm width	Increases available space on the DIN-Rail		
Parallel capable	Hold-up time can be easily extended		
Output remote on/off function	Avoids unsafe discharge of stored energy		

Model	Input voltage range Vin	Output voltage	Average buffer power	Maximum current
DBM20	23 – 30Vdc	22,4Vdc or Vin-1Vdc	448W	20A











CUS400M

3 x 5" 400W medical AC-DC power supplies



Features	Benefits
250W convection / conduction cooled with 400W peak for extended time periods	Quiet operation
400W with forced air	Can utilise system airflow or integrated fan
Medical certifications (2 x MOPP)	Suitable for B and BF type medical equipment
Class B conducted and radiated EMI	Easier system EMC compliance
Suitable for Class I and Class II installations	Flexible utilisation
Compact 3 x 5 x 1.55" size	Space saving in end equipment
Enclosure & signal options	Versatile application

Model	Output power	Output voltage	Input voltage	Size	Mechanical format	Cooling
CUS400M	400W	12, 15, 19, 24, 28, 36, 48Vdc	85 – 264Vac	3 x 5"	Open frame, baseplate, U-channel, enclosed, enclosed with top fan	⋄ ♥₩















CUS600M

3 x 5" 600W medical AC-DC power supplies



Features	Benefits
400W (600W Peak) convection cooled	Quiet operation
600W with forced air	Can utilise system airflow or integrated fan
Medical certifications (2 x MOPP)	Suitable for B and BF type medical equipment
Class B conducted and radiated EMI	Easier system EMC compliance
Suitable for Class I and Class II installations	Flexible utilisation
Compact 3 x 5 x 1.46" size	Space saving in end equipment
Enclosure & other options	Versatile application

Model	Output power	Output voltage	Input voltage	Size	Mechanical format	Cooling
CUS600M	600W	12, 19, 24, 28, 32, 36, 48Vdc	85 – 265Vac	3 x 5"	Open frame, enclosed with end fan	♥ ®













GENESYS[™] 7.5kW

7.5kW in 1U Height, 19 inch



Fea	ıtu	res
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7.5kW models in 1U, 19" Full-Rack Mount

Output voltage up to 1500V, current up to 375A

Up to 92% efficiency

Higher power systems can be configured with up to twelve (12) 7.5kW units. Each unit is 1U with zero space between them (zero stack).

Industry leading power density

Constant voltage / constant current / constant power limit control

Scalable power systems up to 60kW

Voltage and current slew rate control

Arbitrary waveform function and profile storage

Internal resistance control

LAN (LXI1.5), USB, RS-232/RS-485 and isolated* analog interfaces as standard

Optional Interface for EtherCAT, Modbus-TCP, IEEE 488.2 SCPI

Options: blank front panel, dust filter cover

Applicati	ons
Test and me	easurement
Automation	
Component	Device Testing
Automotive	
Burn-in	
Medical Ima	aging

Model	Power	Output voltage ranges	Output current ranges	Height / Package	Cooling
G	7.5kW	0 – 20 to 0 – 1500V	0 – 5 to 0 – 375A	1U/19"	8









^{*}isolated up to 600V





GENESYS[™] Fast-Speed Models

1.7kW/3.4kW/5kW - 20V/30V/40V in 1U height, 19 inch



Features

Up-and-down programming time Tr < 1ms, Tf < 2ms

Fast response to meet automotive testing standards

Lower output capacitance

Constant voltage and constant current modes with power limit operation

AC input range:

- Single phase and three phase are available
- Wide single phase input range 85 265Vdc (G1.7kW)
- Single phase input range 170 265Vac (G3.4kW)
- Wide three phase input range 208Vac /400Vac /480Vac (G3.4kW/5kW)

Arbitrary waveform generation and storage with auto trigger capability

Programmable slew rate control (Vout/lout)

Internal resistance programming

Built-In remote isolated analog interfaces

Built-In LAN (LXI 1.5), USB, and RS-232/RS-485 interfaces

Optional EtherCAT, Modbus-TCP, IEEE (488.2) interfaces

Optional isolated analog current Program/Monitor interface (4-20mA)

Blank front panel option available

Safety IEC 61010-1:2010, IEC 61010-1:2010/AMD1:2016

Applications

Automotive test

Engine control

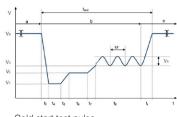
Powertrain control (including hybrid drive technologies and electric drives)

Vehicle dynamics (e.g.: HIL, ESP, damping control)

Comfort electronics

Interior systems

Infotainment



Cold start test pulse

Model	Power	Output voltage ranges	Output current ranges	Height / Package	Cooling
G/F	1.7kW	0 – 20 to 0 – 40V	0 – 42 to 0 – 85A	1U/19"	€
G/F	3.4kW	0 – 20 to 0 – 40V	0 – 85 to 0 – 170A	1U/19"	₿
G/F	5kW	0 – 20 to 0 – 40V	0 – 125 to 0 – 250A	1U/19"	8









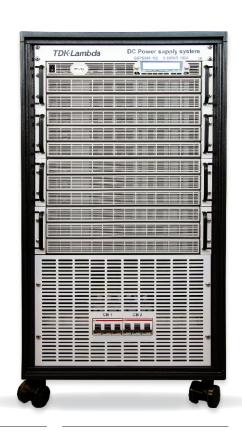




G∉**NESYS**[™] GSPS

Configurable solutions 30kW/45kW/60kW 20U height, 19 inch rack cabinet





Features

Constant voltage and constant current modes with power limit operation

Output current up to 4500A and output voltages up to 600V

Wide three phase input range 342 – 528Vac or 170 – 265Vac

Arbitrary waveform generation and storage with auto trigger capability

Programmable slew rate control (Vout/lout)

Internal resistance programming

Built-In remote isolated analog interface

Built-In LAN (LXI 1.5), USB, and RS-232/RS-485 interfaces

Optional EtherCAT, Modbus-TCP, IEEE (488.2) interfaces

Blank front panel option available

Safety IEC 61010-1:2010, IEC 61010-1:2010/AMD1:2016

Applications

Test & measurement systems

Component device testing

Industrial automation and process control

Semiconductor processing & Burn-In

Aerospace & satellite testing

Automotive component & HIL testing

Magnets, RF magnifiers and beam steering

Model	Power	Output voltage ranges	Output current ranges	Height / Package	Cooling
GSPS	30kW	0 – 10 to 0 – 600V	0 – 51 to 0 – 3000A	20U/19"	8
GSPS	45kW	0 – 20 to 0 – 600V	0 – 76.5 to 0 – 2250A	20U/19"	8
GSPS	60kW	0 – 10 to 0 – 600V	0 – 102 to 0 – 4500A	20U/19"	₿



Product-Website







TDK·Lambda





GENESYS[™] GSPL

15kW in 2U, 22.5kW in 3U, 19 inch COMING SOON





Features	Applicat
15kW models in 2U, 19" Full-Rack Mount	Test and m
22.5kW in 3U, 19" Full-Rack Mount	Automation
Output voltage up to 1500V, current up to 1125A	Componer
Up to 92% efficiency	Automotive
Industry leading power density	Burn-in

Constant voltage / constant current / constant power limit control

Scalable power systems up to 60kW (to 90kW will follow)

Voltage and current slew rate control

Arbitrary waveform function and profile storage

Internal resistance control

LAN (LM 1.5), USB, RS-232/RS-485 and isolated* analog interfaces as standard

Optional Interface for EtherCAT, Modbus-TCP, IEEE 488.2 SCPI

Options: blank front panel, dust filter cover

*isolated up to 600V

tions

measurement

ent Device Testing

Medical Imaging

Model	Power	Output voltage ranges	Output current ranges	Height / Package	Cooling
GSPL	15kW	0 – 20 to 0 – 1500V	0 – 10 to 0 – 750A	2U/19"	8
GSPL	22.5kW	0 – 20 to 0 – 1500V	0 – 15 to 0 – 1125A	3U/19"	8



NEW FAMILY

PYH200

200W, ½ brick, PCB mount, DC-DC converter isolated





Features	Benefits
Half-brick footprint	Industry standard package size
14 - 160Vdc wide input range (12:1)	Supports the majority of railway DC input voltages
Certified to IEC 62368-1, tested according to EN 50155	Easier system compliance
Potted plastic case	High resistance to shock and vibration
3000Vac input to output isolation	Suitable for railway and industrial applications

Model	Output power	Output voltage	Input voltage	Cooling
PYH200	200W	12V, 15V, 24V, 48V	14 – 160V	<u></u>







PXD40/60

40W, 60W single and dual output DC-DC converters





Supports dual 12/24V or 24/48 system voltages
oupports dual 12/24 v of 24/40 system voltages
Less board area needed
Suitable for industrial applications
Longer battery life
Reduces radiated noise

Model	Output power	Output voltage	Input voltage	Cooling
PXD40	40W	3.3V - 48V, ±12V, ±15V, ±24V	9 – 36V / 18 – 75V	•
PXD60	60W	3.3V - 24V, ±12V, ±15V, ±24V	9 – 36V / 18 – 75V	•







CCG

1.5 and 3W DC-DC converters



Features	Benefits
Wide 4:1 input ranges	Supports dual 5/12V, 12/24V or 24/48V system voltages
Space saving package sizes	Less board area needed
Certified to IEC 62368-1	Easier system compliance
educed derating at high ambient temperatures	More useable power
lo silicone potting	Reduced quality risk during surface mount reflow process
	Reduced quality risk during surface

Model	Output power	Output voltage	Input voltage	Size	Cooling
CCG	1.5 and 3W	3.3, 5, 12, +/-12, 15, +/-15Vdc	4.5 to 18V, 9 to 36V or 18 to 76Vdc	15.7x 10.4 x 11.5mm	<u></u>















i7A

750W, 18 to 60V input non-isolated step down DC-DC converters



Benefits
High power density, less board area needed
Longer battery life / less power consumed
One part supports multiple system voltages
Can operate from different DC source voltages including batteries
Low cost
Easy to cool in end system

Model	Output power	Output voltage	Input voltage	Package	Cooling
i7A4W	33A	3.3 – 24Vdc	18 – 60Vdc	1/16 Brick wide	() ()
i7A	45A	3.3 – 18Vdc	18 – 32Vdc	1/16 Brick wide	() ()















i7C

300W, 9 - 53V input, buck-boost non-isolated DC-DC converters



Features	Benefits
Up to 300W in a 1/16th brick pin-out	High power density, less board area needed
High efficiency – up to 97%	Longer battery life / low power consumed
Wide 5 to 28V, 8 to 24V or 9.6 to 48V output adjustment	One part supports multiple system voltages
Wide 9 to 36V or 9 to 53V input range	Can operate from different DC source voltages
Low component count with minimal external components	Low cost
Low airflow with minimal derating requirements	Easy to cool in end system

Model	Output power	Output voltage	Input voltage	Package	Cooling
i7C4W	12.5A	5.0 – 28Vdc	9 – 53Vdc	1/16 Brick wide	() ()
i7C4W	8A	9.6 – 48Vdc	9 – 53Vdc	1/16 Brick wide	() (
i7C4W	20A	8.0 – 24Vdc	9 – 36Vdc	1/16 Brick wide	() (















NEW RANGE

250 to 500W wide range, non-isolated **DC-DC** converters





Features	Benefits
250W single output, 325W and 500W dual output power levels	High power density
High efficiency up to 95%	Less waste heat
Wide input range – 9 up to 53V	One part for multiple applications
Wide 3.3 to 24V output adjustment	Accommodates non-standard voltages
Narrow 36.5mm width	More space available for other DIN-Rail devices
Convection cooled	Easy to cool in end system

Model	Output power	Output current range	Output voltage		Input voltage	Cooling
DDA250	250W / NA	20A / NA	1) 12V / 3.3 to 15V	2) NA / NA	9 to 53V (Turn on at 10V or greater)	V S
DDA325	250W / 75W	14A / 8A	1) 12V / 3.3 to 24V	2) -12V / -3.3 to -24V	9 to 40V (Turn on at 10V or greater)	♥ 🛇
DDA500	250W / 250W	20A / 20A	1) 12V / 3.3 to 15V	2) 5V / 3.3 to 15V	9 to 53V (Turn on at 10V or greater)	() ()









TDK-Lambda France SAS

Tel. +33 1 60 12 71 65 tlf.fr.powersolutions@tdk.com www.emea.lambda.tdk.com/fr



TDK-Lambda Americas

Tel. +1 800-LAMBDA-4 or 1-800-526-2324 tla.powersolutions@tdk.com www.us.lambda.tdk.com



Italy Sales Office

Tel. +39 02 61 29 38 63 tlf.it.powersolutions@tdk.com www.emea.lambda.tdk.com/it



TDK Electronics do Brasil Ltda

Tel. +55 11 3289-9599 sales.br@tdk-electronics.tdk.com www.tdk-electronics.tdk.com/en



Netherlands

tlf.nl.powersolutions@tdk.com www.emea.lambda.tdk.com/nl



TDK-Lambda Corporation

Tel. +81 3 6778 1113 www.jp.lambda.tdk.com



TDK-Lambda Germany GmbH

Tel +49 7841 666 0 tlg.powersolutions@tdk.com www.emea.lambda.tdk.com/de



TDK-Lambda (China) Electronics Co. Ltd.

Tel. +86 21 6485 0777 tlc.powersolutions@tdk.com www.lambda.tdk.com.cn



Austria Sales Office

Tel. +43 2256 655 84 tlg.at.powersolutions@tdk.com www.emea.lambda.tdk.com/at



TDK-Lambda Singapore Pte Ltd. Tel. +65 6251 7211

tls.marketing@tdk.com www.sg.lambda.tdk.com



Switzerland Sales Office

Tel. +41 44 850 53 53 tlg.ch.powersolutions@tdk.com www.emea.lambda.tdk.com/ch



TDK India Private Limited,

Power Supply Division Tel. +91 80 4039 0660 mathew.philip@tdk.com www.sg.lambda.tdk.com



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Nordic Sales Office

Tel. +45 8853 8086 tlg.dk.powersolutions@tdk.com www.emea.lambda.tdk.com/dk



TDK-Lambda UK Ltd.

Tel. +44 (0) 12 71 85 66 66 tlu.powersolutions@tdk.com www.emea.lambda.tdk.com/uk



TDK-Lambda Ltd.

Tel +9 723 902 4333 tli.powersolutions@tdk.com www.emea.lambda.tdk.com/il-en

Local Distribution		