



# Power Supplies

# 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 power supplies and service and shows why leading manufacturers and OEM clients for industrial and medical applications rely on TDK-Lambda solutions.

**[www.emea.lambda.tdk.com](http://www.emea.lambda.tdk.com)**



# TDK-Lambda Value

TDK-Lambda Corporation, a group company of TDK Corporation, is a leading global power supply company providing highly reliable power supplies worldwide. Our comprehensive range of 1.5W to 100kW AC-DC power supplies, DC-DC converters, Programmable (Lab) DC power supplies and EMC/EMI noise filters suit many applications. With design and manufacturing facilities in EMEA, Asia and America, TDK-Lambda is a major supplier of power conversion products and recognized leader in the industrial market segment.

## **TDK-Lambda offers customers a unique proposition for power supply solutions.**

We offer you innovative reliable power supplies combined with design-in assistance, global logistics expertise and total life cycle support.

## **TDK-Lambda Quality**

Quality can never be assured entirely by final inspection. Quality at TDK-Lambda means a continuous process beginning at the development of a power supply. Extensive R&D activities, field proven topologies, components and validation and test methodologies coupled with the extraordinary process reliability and high production quality leads to TDK-Lambda Quality.

## **Strong global organization**


As a member of TDK Group we are a global player based in five key areas covering Japan, EMEA, North America, China and SE Asia. All over the world we are confident of being a trusted partner and offer you innovative and reliable power products combined with dependable service.

## **Excellent sales and technical support**

We support you with everything from design-in assistance, EMC standards and safety certification through to mass production and long term back up. We offer responsive local sales and service support backed up by important Advanced Technology Research, new product development and manufacturing centres.

## **Highly experienced global logistics capability**

Uniquely we can provide the optimum manufacturing strategy for your needs in our own fully equipped plants from low volume to high volume manufacturing.



Similarly we have multiple strategically located warehouses, offering a full menu of logistic services including tailor-made solutions.

**Leaders in the development of advanced technologies**

Our position as a highly experienced, leading global supplier means we can capitalise on our extensive Advanced Technology Research and over 700 patents to provide the next generation of innovative, leading edge power solutions. Highly motivated R&D teams, located in design facilities worldwide have knowledge of the key attributes of many different applications gained from many years experience.

**Lowest cost of ownership**

Our key focus is not only ensuring the long term reliability of our products but also being reliable in all aspects of our business delivering high quality products and services. As well as satisfying your technical requirements we will always offer you the best all round solution taking into account cost, time to market and reliability.

Choose TDK-Lambda for excellent service and all your power needs.

# Highlights

Here we would like to present an overview of our latest power supply solutions designed for a wide spectrum of industrial and medical applications. We offer innovative and reliable AC-DC power supplies, DC-DC converters, programmable power supplies and EMI/EMC Filters.

Like all TDK-Lambda power supplies these models meet the highest criteria for quality and reliability. We support this by offering industry leading warranty.

Please see our complete product lineup at the end of the brochure.

## MU4 Series

### Configurable AC-DC power supplies

- 36dBA\*\* extremely low audible noise - Intelligent Fan Control (IFC)
- Safety Certifications IEC/EN/UL60601-1, 62368-1, 60950-1
- Full MOPP, Input & Output to Earth and Primary to Secondary
- Suitable for B and BF rated equipment
- Output flexibility continuous output voltage 3.3 – 104Vdc
- PMBus™ communication option with individual output control and diagnostics
- 1U height



PMBus

[www.emea.lambda.tdk.com/mu](http://www.emea.lambda.tdk.com/mu)



Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Standby supply
<b>NEW</b> MU4	600 – 800W	1 – 5	3.3 – 104Vdc	85 – 264 Vac	7 years		optional 5V

\*including auxiliary outputs \*\* Configuration dependent, nominal conditions of 25°C, 115Vac/240Vac and 80% unit power

## XMS500 Series

### Configurable AC-DC power supplies

- Flexible with many case and signal options
- Suitable for 1U profile
- Low airflow requirement
- BF ready medical isolation (MOPP)
- Protection Class I or II options
- EN55011/22 Class B (conducted and radiated)



[www.emea.lambda.tdk.com/xms500a](http://www.emea.lambda.tdk.com/xms500a)  
[www.emea.lambda.tdk.com/xms](http://www.emea.lambda.tdk.com/xms)



Model	Output power	Number of outputs	Output voltage	Input voltage	Warranty	Cooling	Medical
XMS500	500W	1	12, 24, 36, 48Vdc	90 – 264Vac	5 years		
XMS500A	500W	1	12, 24, 36, 48Vdc	85 – 264Vac	5 years		

## QM Series

### Configurable AC-DC power supplies

- Flexible with many output combinations
- Low speed, low audible noise fan
- BF ready medical isolation (MOPP)
- PMBus™ communication option



PMBus

[www.emea.lambda.tdk.com/qm](http://www.emea.lambda.tdk.com/qm)



Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Medical
QM4	550 – 650W	1 – 10	2.8 – 105.6Vdc	90 – 264Vac	7 years		
QM5 / QM5H	700 – 1200W	1 – 12	2.8 – 105.6Vdc	90 – 264Vac	7 years		
QM7	1200 – 1500W	1 – 16	2.8 – 105.6Vdc	90 – 264Vac	7 years		
QM8	1200 – 1500W	1 – 18	2.8 – 105.6Vdc	90 – 264Vac	7 years		
QM8B	1200 – 2000W	1 – 18	2.8 – 105.6Vdc	90 – 264Vac	7 years		

\*including auxiliary outputs

## QS Series

### Single output AC-DC power supplies

- BF ready medical isolation (MOPP)
- Low speed, low audible noise fan
- Dual or single fusing
- PMBus™ communication option



PMBus

[www.emea.lambda.tdk.com/qs](http://www.emea.lambda.tdk.com/qs)



Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Medical
QS4	600W	3	12, 24, 48Vdc	90 – 264Vac	7 years		
QS5	600W	3	24, 48Vdc	90 – 264Vac	7 years		
QS5H / QS7	1080 – 1200W	3	12, 24, 48Vdc	90 – 264Vac	7 years		

\*including auxiliary outputs

# TPS Series

## 3-Phase Input AC-DC power supplies

- 400/440/480 Vac (Nominal) 3 Phase Delta or Wye
- Fully regulated, wide range adjustable output
- Remote programming of voltage and current
- -40°C (start up) to +70°C operation temperature
- Built in ORing FET for parallel operation
- PMBus™ communication



[www.emea.lambda.tdk.com/tps](http://www.emea.lambda.tdk.com/tps)



Model	Output power	Output voltage	Input voltage	Warranty	Cooling
TPS3000	3000 – 3200W	24, 48Vdc	350 – 528Vac	3 years	
TPS4000	4000 – 4080W	24, 48Vdc	350 – 528Vac	3 years	

# RWS-B Series

## General AC-DC power supplies

- High power density
- Compact size
- Long e-cap lifetime
- Standby option (1000B, 1500B)



[www.emea.lambda.tdk.com/rwsb](http://www.emea.lambda.tdk.com/rwsb)



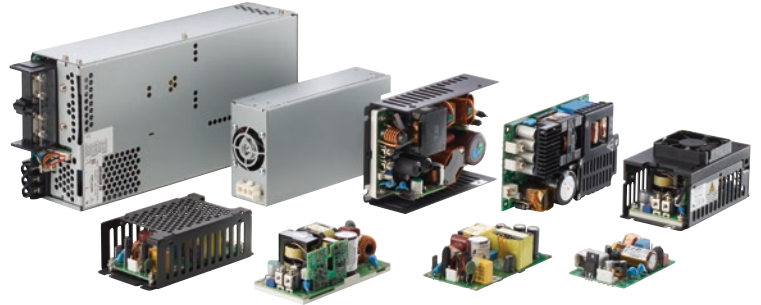
Model	Output power	Output voltage	Input voltage	Warranty	Cooling	Medical
RWS50B	50W	5, 12, 24, 48Vdc	85 – 265Vac	7 years		
RWS100B	100W	5, 12, 24, 48Vdc	85 – 265Vac	7 years		
RWS150B	150W	5, 12, 15, 24, 28, 48Vdc	85 – 265Vac	7 years		
RWS300B	300W	5, 12, 15, 24, 36, 48Vdc	85 – 265Vac	7 years		
RWS600B	600W	5, 12, 15, 24, 36, 48Vdc	85 – 265Vac	7 years		
RWS1000B/S	1000W	12, 15, 24, 36, 48Vdc + 5Vdc Aux.	85 – 265Vac	7 years		
RWS1500B/S	1500W	12, 15, 24, 36, 48Vdc + 5Vdc Aux.	85 – 265Vac	7 years		
RWS1000B/ME	1000W	12, 15, 24, 36, 48Vdc	85 – 265Vac	7 years		
RWS1500B/ME	1500W	12, 15, 24, 36, 48Vdc	85 – 265Vac	7 years		



# CUS-M Series

## Models from 30W to 1500W

- Safety Certifications EN62368-1 and EN60601-1
- Suitable for B and BF rated equipment (2 x MOPP)
- Class B conducted and radiated EMI
- High efficiency up to 96%
- Models suitable for Class I and Class II installations
- Peak power ratings up to 30 minutes (CUS400M), up to 1000W (CUS350MP-1000)
- Baseplate for conduction cooling (CUS100ME, CUS150M, CUS250M, CUS400M)
- Several mechanical options



[www.emea.lambda.tdk.com/cus\\_m](http://www.emea.lambda.tdk.com/cus_m)



	Model	Output power	Output voltage	Input voltage	Size	Mechanical format	Warranty	Cooling
	CUS30M	30W	12, 24, 48Vdc	85 – 265Vac	2x3"	Open frame, enclosed	3 years	
	CUS60M	60W	5, 12, 15, 18, 24, 48Vdc	85 – 265Vac	2x3"	Open frame, enclosed	3 years	
	CUS100ME	100W	12, 15, 18, 24, 28, 36, 48Vdc	85 – 264Vac	2x4"	Open frame, U-channel, baseplate, enclosed	5 years	
	CUS150M	150W	12, 15, 18, 24, 28, 36, 48Vdc	85 – 264Vac	2x4"	Open frame, U-channel, baseplate, enclosed, enclosed with top fan	5 years	
	CUS200M	200 – 250W	12, 18, 24, 36, 48Vdc	85 – 265Vac	3x5"	Open frame, L bracket, enclosed	3 years	
<b>NEW</b>	CUS250M	250W	12, 15*, 18*, 24, 28*, 36*, 48*Vdc	85 – 264Vac	2x4"	Open frame, U-channel, enclosed, enclosed with top fan	5 years	
	CUS350M	350 – 420W	12, 18, 24, 36, 48Vdc	85 – 265Vac	3.4x7.5"	U-channel, enclosed	3 years	
	CUS350MP	350 – 1000W	24, 48Vdc	85 – 265Vac	3.46x7.2"	Open frame, enclosed	5 years	
	CUS400M	400W	12, 15, 19, 24, 28, 36, 48Vdc	85 – 264Vac	3x5"	Open frame, baseplate, U-channel, enclosed, enclosed with top fan	5 years	
<b>NEW</b>	CUS500M1	500W	12, 19, 24, 28, 32, 36, 48Vdc	85 – 264Vac	3x5"	Open frame, enclosed with end fan	5 years	
	CUS600M	600W	12, 19, 24, 28, 32, 36, 48Vdc	85 – 265Vac	3x5"	Open frame, enclosed with end fan	5 years	
	CUS1500M	1500W	12, 18, 24, 36, 48Vdc	85 – 265Vac	5x10.3"	Enclosed	7 years	

\* coming soon

# DRM40 Series

## Parallel or redundancy modules

- 150% peak load, 4sec
- Reverse input protection
- -40 ~ +70°C ambient
- DC OK LEDs and signals
- Current balancing LED\*
- Ultra compact footprint\*



[www.emea.lambda.tdk.com/drm40](http://www.emea.lambda.tdk.com/drm40)

Model	Output power	Output voltage	Input voltage	Warranty	Notes
DRM40 / DRM40B	2x20A, 1x40A	10 - 30Vdc	10 - 30Vdc	3 years	Metal case

\*not for ‚B‘ type

# DRB 3 Phase Series

## 3 phase DIN-Rail power supplies

- Wide 3 phase input range for various AC power systems
- Boost current of up to 150% for 5s supports start-up into capacitive loads
- 20% power reserve enables for future system extensions



[www.emea.lambda.tdk.com/drb-3-phase](http://www.emea.lambda.tdk.com/drb-3-phase)

Model	Output power	Output voltage	Input voltage	Warranty	Notes
DRB120	120W	12, 24VDC	3x400 ..500VAC	3 years	Available with screw or push-in terminals
DRB240	240W	24, 48VDC	3x400 ..500VAC	3 years	Available with screw or push-in terminals
DRB480*	480W	24, 48, 72VDC	3x400 ..500VAC	3 years	Available with screw or push-in terminals
DRB960*	960W	24, 48, 72VDC	3x400 ..500VAC	3 years	Available with screw or push-in terminals

\* coming soon

## DRB15-100 Series

### Single output DIN-Rail power supplies

- Single phase input
- Excellent efficiency – up to 93%
- Low-power devices in a polycarbonate housing for stringent safety requirements



[www.emea.lambda.tdk.com/drB](http://www.emea.lambda.tdk.com/drB)



Model	Output power	Output voltage	Input voltage	Warranty	Notes
DRB15	15W	24VDC	85 .. 265VAC	3 years	Polycarbonate housing
DRB30	30W	12, 24VDC	85 .. 265VAC	3 years	Polycarbonate housing
DRB50	50W	5, 12, 15, 24, 48VDC	85 .. 265VAC	3 years	Polycarbonate housing
DRB100	100W	24VDC	85 .. 265VAC	3 years	Polycarbonate housing

## DRB120-480 Series

### Single output DIN-Rail power supplies

- Single phase input
- Excellent efficiency – up to 93%
- Compact power supplies for efficient plant control systems



[www.emea.lambda.tdk.com/drB](http://www.emea.lambda.tdk.com/drB)

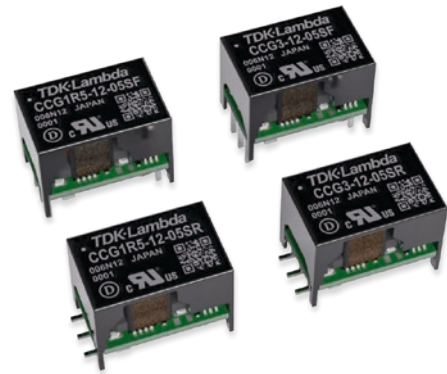


Model	Output power	Output voltage	Input voltage	Warranty	Notes
DRB120	120W	12, 24, 48VDC	85 .. 265VAC	3 years	Metal housing
DRB240	240W	24, 48VDC	85 .. 265VAC	3 years	Metal housing
DRB480	480W	24, 48VDC	85 .. 265VAC	3 years	Metal housing

# CCG Series

## 1.5 and 3W DC-DC converters

- All purpose DC-DC converters
- Compact size
- 4:1 Wide-range DC-input
- High efficiency, up to 91%
- Six sided shielding (CCG15, CCG30)
- THT and SMD versions (CCG1R5, CCG3, CCG6, CCG10)



[www.emea.lambda.tdk.com/ccg](http://www.emea.lambda.tdk.com/ccg)



Model	Output power	Output voltage	Input voltage	Size	Pin style	Warranty	Cooling
CCG1R5	1.5W	3.3, 5, 12, 15, $\pm 12$ , $\pm 15$ Vdc	4.5 – 18Vdc, 9 – 36Vdc, 18 – 76Vdc	0.62 x 0.41 x 0.45"	SMD, THT	5 years	
CCG3	3W	3.3, 5, 12, 15, $\pm 12$ , $\pm 15$ Vdc	4.5 – 18Vdc, 9 – 36Vdc, 18 – 76Vdc	0.62 x 0.41 x 0.45"	SMD, THT	5 years	
CCG6*	6W	3.3, 5, 12, 15, $\pm 12$ , $\pm 15$ Vdc	4.5 – 18Vdc, 9 – 36Vdc, 18 – 76Vdc	0.75 x 0.49 x 0.45"	SMD, THT	5 years	
CCG10*	10W	3.3, 5, 12, 15, $\pm 12$ , $\pm 15$ Vdc	4.5 – 18Vdc, 9 – 36Vdc, 18 – 76Vdc	0.75 x 0.49 x 0.45"	SMD, THT	5 years	
CCG15	15W	3.3, 5, 12, 15, $\pm 12$ , $\pm 15$ Vdc	9 – 36Vdc, 18 – 76Vdc	1 x 1 x 0.39"	THT	5 years	
CCG30	30W	3.3, 5, 12, 15, $\pm 12$ , $\pm 15$ Vdc	9 – 36Vdc, 18 – 76Vdc	1 x 1 x 0.39"	THT	5 years	

\* coming soon

# i3, i6, i7 Series

## Non-isolated DC-DC converters

- All purpose buck, buck-boost or inverting converters
- Compact size
- Very high efficiency, up to 98%
- Minimal external components needed
- Wide output adjustment range



[www.emea.lambda.tdk.com/i3-6-7](http://www.emea.lambda.tdk.com/i3-6-7)



Model	Converter type	Output current	Output voltage	Input voltage	Warranty	Package	Cooling
i3A	Buck	4.5A	5 – 30Vdc	9 – 53Vdc	3 years	1/32 Brick	
i3A	Buck	8A	3.3 – 16.5Vdc	9 – 53Vdc	3 years	1/32 Brick	
i6A	Buck	14A	3.3 – 24Vdc	9 – 40Vdc	3 years	1/16 Brick	
i6AN	Inverter	8A	-3.3 to -30Vdc	9 – 40Vdc	3 years	1/16 Brick	
i6A4W	Buck	10A	3.3 – 40Vdc	9 – 53Vdc	3 years	1/16 Brick	
i6A4W	Buck	20A	3.3 – 15Vdc	9 – 53Vdc	3 years	1/16 Brick SIP	
i6A4W SIP	Buck	10A	3.3 – 40Vdc	9 – 53Vdc	3 years	1/16 Brick	
i6A4W SIP	Buck	20A	3.3 – 15Vdc	9 – 53Vdc	3 years	1/16 Brick SIP	
i7A4W	Buck	33A	3.3 – 24Vdc	18 – 60Vdc	3 years	1/16 Brick pinning	
i7A	Buck	45A	3.3 – 18Vdc	18 – 32Vdc	3 years	1/16 Brick pinning	
i7C4W	Buck-boost	12.5A	5.0 – 28Vdc	9 – 53Vdc	3 years	1/16 Brick pinning	
i7C4W	Buck-boost	8A	9.6 – 48Vdc	9 – 53Vdc	3 years	1/16 Brick pinning	

## RGA Series

### Non-isolated buck converters

- Robust design in aluminum die cast housing
- Compact size with four mounting tabs
- Very high efficiency, up to 98%
- COTS – MIL STD-810G Shock a& Vibration
- Wide output adjustment range



[www.emea.lambda.tdk.com/rga](http://www.emea.lambda.tdk.com/rga)



Model	Converter type	Output current	Output voltage	Input voltage	Warranty	Size	Cooling
RGA-010	Buck	10A	3.3 – 40Vdc	9 – 53V	3 years	1.4 x 1.4 x 0.51"	
RGA-014	Buck	14A	3.3 – 24Vdc	9 – 40V	3 years	1.4 x 1.4 x 0.51"	
RGA-020	Buck	20A	3.3 – 15Vdc	9 – 53V	3 years	1.4 x 1.4 x 0.51"	

## PY Series

### Isolated DC-DC converters

- Ultra-wide input voltage range
- EN 50155 Railway compliant
- EN 45545-2 Fire protection assessed
- IEC 61373 Shock and vibration tested
- EC 62368-1 (ICT) approved
- High input to output isolation strength
- Tailored heatsink options available



[www.emea.lambda.tdk.com/py](http://www.emea.lambda.tdk.com/py)



Model	Output power	Output voltage	Input voltage	Size	Isolation	Warranty	Cooling
PYD20	20W	5, 12, 15, ±12, ±15, ±24Vdc	8.5 – 160Vdc (18:1)	2 x 1 x 0.5"	3000Vac	3 years	
PYQ50	30 – 50W	5, 12, 24, 48Vdc	9 – 75Vdc (8:1)	Quarter-brick 2.28 x 1.45 x 0.5"	3000Vdc	3 years	
PYQ75	75W	12, 15, 24, 28, 48Vdc	14 – 160Vdc (12:1)	Quarter-brick 2.28 x 1.45 x 0.5"	3000Vac	3 years	
PYH200	200W	12, 15, 24, 48Vdc	14 - 160Vdc (12:1)	Half-brick 2.28 x 2.4 x 0.5"	3000Vac	3 years	

## z+ Series

### Programmable power supplies

- 2U high
- Rack or bench mount
- USB, RS232/485 & analogue control and monitoring
- Built in arbitrary function generation and storage
- User programmable output signal pins
- Optional: LAN, IEEE, isolated analogue interfaces & front panel output sockets



[www.emea.lambda.tdk.com/zplus](http://www.emea.lambda.tdk.com/zplus)



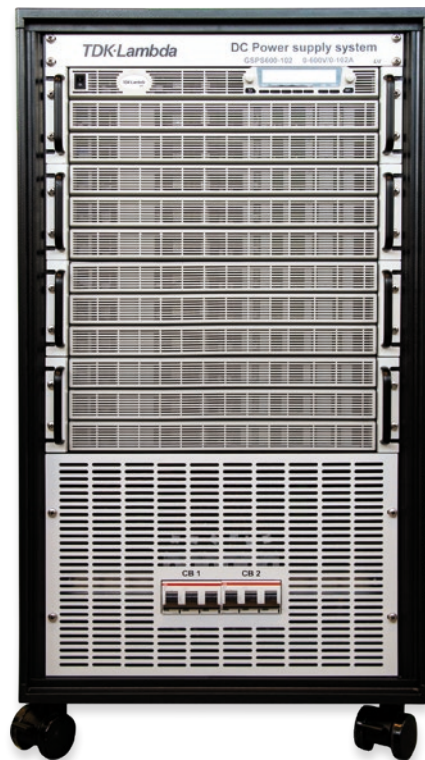
Power	Output voltage ranges	Output current ranges	Warranty	Height	Cooling
200W	0-10 ~ 0-650Vdc	0-20 ~ 0-0.32A	5 years	2U	
400W	0-10 ~ 0-650Vdc	0-40 ~ 0-0.64A	5 years	2U	
600W	0-10 ~ 0-650Vdc	0-60 ~ 0-1A	5 years	2U	
800W	0-10 ~ 0-650Vdc	0-72 ~ 0-1.25A	5 years	2U	

33 models available

## GENESYS™ GSPS Series

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

- 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/Iout)
- Internal resistance programming
- Built-In remote isolated analog interface
- Built-In LAN (LAN 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



[www.emea.lambda.tdk.com/gsp](http://www.emea.lambda.tdk.com/gsp)



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

## GENESYS™ Series

### Programmable power supplies

- Industry leading power density (1-7.5kW - 1U, 10kW - 2U, 15kW - 3U)
- Half Rack Mount for 1 / 1.5kW
- Standard Interfaces: LAN (**LAN** 1.5), USB, RS-232/RS-485, isolated analogue monitoring and control
- Arbitrary waveform functions and profiles
- Scalable power systems up to 60kW (auto-configuring)
- Constant power limit and slew rate control
- Internal resistance simulation programming
- Wide range of AC inputs
- Efficiency up to 92%
- Optional EtherCAT, Modbus-TCP and IEEE488 Interfaces
- Options: blank front panel, dust filter cover, Rack Mount kits (only for GH models)



[www.emea.lambda.tdk.com/genplus](http://www.emea.lambda.tdk.com/genplus)



Power	Output voltage ranges	Output current ranges	Warranty	Height	Cooling
GH1kW	0-10 – 0-600Vdc	0-100 – 0-1.7A	5 years	1U, ½ 19"	
GH1.5kW	0-10 – 0-600Vdc	0-150 – 0-2.6A	5 years	1U, ½ 19"	
G1kW	0-10 – 0-600Vdc	0-100 – 0-1.7A	5 years	1U	
G1.7kW	0-10 – 0-600Vdc	0-170 – 0-2.8A	5 years	1U	
G2.7kW	0-10 – 0-600Vdc	0-265 – 0-4.5A	5 years	1U	
G3.4kW	0-10 – 0-600Vdc	0-340 – 0-5.6A	5 years	1U	
G5kW	0-10 – 0-600Vdc	0-500 – 0-8.5A	5 years	1U	
<b>NEW</b> G7.5kW	0-20 – 0-1500Vdc	0-100 – 0-375A	5 years	1U	
GSP10kW	0-10 – 0-600Vdc	0-1000 – 0-17A	5 years	2U	
GSP15kW	0-10 – 0-600Vdc	0-1500 – 0-25.5A	5 years	3U	

**121 models available**

## GENESYS™ GSPL Series

(coming soon)

Power	Output voltage ranges	Output current ranges	Warranty	Height	Cooling
GSPL15	0-20 – 0-1500Vdc	0-10 – 0-750A	5 years	2U	
GSPL22.5	0-20 – 0-1500Vdc	0-15 – 0-1125A	5 years	3U	

# Power+ Solutions

What if a standard power supply does not meet your specifications? You need a different cable, or a special housing?

What if you need this “custom solution” not just once, but for high volume production?

That’s exactly the reason TDK-Lambda has developed the Power+ Solutions programme.

This programme can be adjusted to meet your needs perfectly with additional services in a modular way, up to the full package. Many successful strategic partnerships with our customers are based on the reliability of this concept.

## Value of using TDK-Lambda Power+ Solutions:

- Leading range of customizable standard products
- Full back-up of engineering, logistics and manufacturing services
- Optimum flexibility of local and oversea manufacturers
- Prolonged product lifetime and quality
- Highly experienced local teams
- One dedicated contact takes care of all your demands



## Programme:

### • Modified standard

- A slight modification (electrical and physical) to a standard TDK-Lambda product
- Customized mechanical housing (chassis)
- Filter solutions for input and output
- Additional function and communication/signals
- Non standard voltages
- Cable looms and connectors
- Ruggedisation for shock, vibration, high g and outdoor environments
- Brick on board
- Custom designs utilizing our broad range of AC-DC and DC-DC power modules. Benefits include low NRE and fast time to market.

### • Full custom design to customer specification

A power supply designed to meet the customer’s unique set of requirements



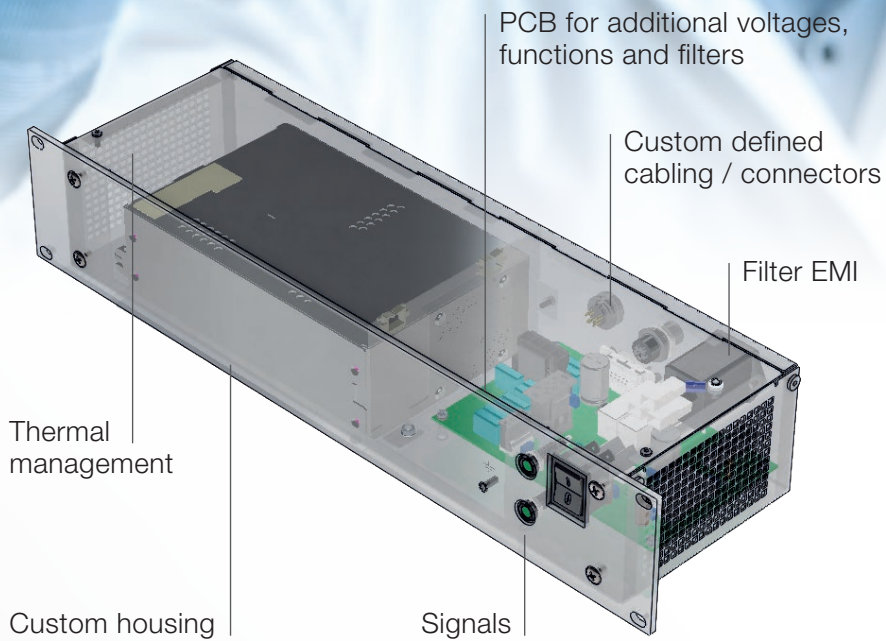


+brick on board

+cable

+Non standard voltage

+logistic support





# Product Overview

## AC-DC Chassis mount – Single output

	LS	CSW65	CUS-M <b>NEW MODELS</b>	CUS-LD	GWS	SWS-L	HWS-A/HD/P/ME
<b>Cooling</b>	↓	↓	↓	↓	↓	↓	↓
<b>Output power</b>	25 – 200W	40 – 65W	30 – 1500W	200, 250W	250, 500W	600, 1000W	15 – 1500W
<b>Main features</b>	Cost optimized	90 – 305Vac AC Input DOE Level VI, ErP Tier 2 DIN Rail mount option	up to 94% efficiency low profile	up to 94% efficiency low profile	ErP compliant Class C Harmonics (IEC 61000-3-2) > 25% Load	Low profile –40°C start up –20°C to 74°C operating	HD: Harsh environment, P: Peak power for 5sec ME: Medical very high reliability
<b>Warranty</b>	5 years	3 years	3, 5, 7 years	3 years	5 years	3 years	<b>Leading warranty *</b>

## AC-DC Chassis mount – Multiple output

	ZWQ	CUT
<b>Cooling</b>	↓	↓
<b>Output power</b>	80 – 170W	35, 75W
<b>Main features</b>	1U height versions 4 outputs	3 outputs 2x4" and 3x5" footprint individual output regulation low profile (1.06")
<b>Warranty</b>	1 years	3 years

## AC-DC Configurable

	MU4 <b>NEW</b>	NV/M	EFE/M	XMS500/A
<b>Cooling</b>	↓	↓	↓	↓
<b>Output power</b>	600 – 800W	175 – 960W	300, 400W	500W
<b>Main features</b>	1 – 8 outputs 3.3 to 104Vdc Low audible noise Suitable for 1U	1 – 8 outputs configurable	Full digital control high power density	Single output suitable for 1U low airflow requirement
<b>Warranty</b>	7 years	3 years	5 years	5 years

## AC-DC DIN Rail

	DRL	DRB	DRB 3 Phase <b>NEW</b>	DRF	DRM	DBM
<b>Cooling</b>	↓	↓	↓	↓	↓	↓
<b>Output power</b>	10 – 100W	15 – 480W	120, 240, 480W, 960W	120, 240, 480, 960W	2x20A / 1x40A	20A
<b>Main features</b>	Designed for building automation systems with Class II reinforced insulation.	Compact power supplies for efficient plant control systems.	Efficient design for conventional mechanical and plant engineering.	Well equipped and designed for harsh environments.	Buffer and redundancy modules further increase plant up-time.	
<b>Warranty</b>	3 years	3 years	3 years	5 years	5 years	5 years

## Buffer module

	ZBM20	PFE
<b>Cooling</b>	↓	↓
<b>Output power</b>	20A	300 – 1000W
<b>Main features</b>	12, 15, 24V nom. 380msec. Holdup	Operating up to 100°C baseplate · PFC high efficiency
<b>Warranty</b>	5 years	2 or 5 years

## AC-DC Programmable

	Genesys+ <b>TM</b> <b>NEW MODELS</b>	GSPS <b>NEW</b>
<b>Cooling</b>	↓	↓
<b>Output power</b>	1000 – 60.000W	30.000 – 60.000W
<b>Main features</b>	1kW in 1U half width up to 60kW in 12U / 19" 0 – 1500V · CV, CC, CP operation mode · arbitrary waveform · built-in USB, RS232/485, LAN (PoE 1.5), Modbus-TCP, EtherCAT · isolated analogue · options: IEEE, Anybus, blank panel, dust filter, fast speed	19" cabinet Assembled with GSP-units Same features/options like GSP
<b>Warranty</b>	5 years	5 years





RWS-B/ME	GXE600	RFE	TPS	CPFE/FI	EVS	ZPSA	ZWS/B BAF/BP
50 – 1500W	600W	1000, 1600, 2500W	3000, 4000W	1000W	300, 600W	20 – 60W	10 – 300W
Compact size 10-year +e-cap lifetime	Digital (RS-485) and analogue programming CV, CC mode up to 95% efficiency	1U · current share optional: PM Bus, internal Oring diodes	400/480 VAC 3phase voltage and current programming	Fanless diode ORing – share option I2C interface	Constant current source	2x3.5" (20W) 2x4" (40/60W) very low height profile	Long e-cap lifetime
7 years	7 years	2 or 3 years	3 years	2 years	5 years	2 years	5 years

AC-DC Rack mount						
QM	QS	VEGA	FPS	HFE	TPF45000-385 <i>NEW</i>	
550 – 2000W	600 – 1200W	450 – 900W	1000W	1600, 2500W	45000W	
1 – 18 outputs Very low audible noise	Single output low audible noise dual or single fusing	1 – 11 outputs configurable	Single output · up to 3000W 3 units in 19" Rack · hot swap optional: I2C bus	Single output · 8kW in 5 slot 19" 10kW in 4 slot 19" · hot swap optional: PMBus™, LAN	PFC-Frontend, 385Vdc, 3-phase input 400 – 480Vac, PMBus™, USB	
7 years	7 years	3 years	2 years	3 years	3 years	






Single / multiple output						AC-DC Desktop	
PFH500	PF-A	KPSA/KPSB	KMS-A/KMD/KMT	KWS-A	KAS	DT/DTM	WMM30
500W	500, 1000W	5 – 25W	15 – 60W	5, 10, 15, 25W	4W	25 – 300W	30W
101.6 x 61.0mm size PMBus™ communication (read-write) · High effi- ciency up to 92%	Low profile 750 or 1500W max. output power PFC front end	Single output · no external components needed · open frame	2x MOPP isolation protection class II	Single · dual output protection class II efficiency values up to 88%	90 – 305VAC protection class II	Single output ErP compliant	Single output ErP compliant Class II wide range AC input
3 years	2 years	2 or 3 years	2 or 3 years	3 years	3 years	2 or 3 years	3 years

Genesys™	Z+	SFL
750 – 5000W	200, 400, 600, 800W	300W, 1000W
1U, 2U · 0 – 600V · bench, rack (19") · built in RS-232/485, analogue · options: LAN, IEEE, Power Sink, Fast speed, isolated analogue · extension: <b>I-SINK</b> function (electronic power sink)	2U · 0 – 650V · bench, 2U rack mounted (6 units) · built in USB, RS232/485, analogue · integrated arbitrary function · options: LAN, IEEE, isolated analogue, front panel output sockets	High speed current control, integrated waveform generator, USB-interface for remote control
5 years	5 years	2 years






### Isolated DC-DC Converters

	CC-E	CCG <b>NEW MODELS</b>	PX <b>NEW MODELS</b>	PX-M <b>NEW MODELS</b>
				
<b>Package</b>	Designed for compact size	Designed for compact size	1x1", 1.25x0.8", 2x1", 2x1.6", 2x2"	1.25x0.8", 1.6x1", 2x1"
<b>Cooling</b>	↓	↓	↓	↓
<b>Output</b>	1.5, 3, 6, 10, 15, 30W	1.5, 3, 6, 10, 15, 30W	5, 10, 15, 20, 30, 40, 60W	3, 6, 10, 15, 20, 30W
<b>Features</b>	Input: DC 5, 12, 24, 48V (2:1) Output: 3.3 – 15Vdc, Single, dual outputs	Input: DC 5, 12, 24, 48V (4:1) Output: 3.3 – 15Vdc Single, dual outputs	Input: DC 12V, 24V, 48V Output: 3.3 – 48Vdc Single, dual, tripple outputs	Input: DC 12, 24, 48V (4:1) Output: 3.3 – 48Vdc
<b>Warranty</b>	5 years	5 years	2 years	5 years





### Isolated DC-DC Converters

	PH-A280 <b>NEW MODELS</b>	HQA	GQA	iEA, iEH	iQE, iQG, iQL
					
<b>Package</b>	1/4 Brick, 1/2 Brick, Full Brick	1/4 Brick	1/4 Brick	1/8 Brick	1/4 Brick
<b>Cooling</b>	Ⓜ	Ⓜ	Ⓜ	↓ Ⓜ	Ⓜ
<b>Output</b>	50, 75, 100, 150, 300, 600, 1200W	85W, 120W	120W	48 – 78, 300W	72 – 504W
<b>Features</b>	Input: DC 280V Output: 3.3 – 48Vdc	Input: DC 12, 24V Output: 5 – 48Vdc	Input: DC 12, 24V Output: 5 – 48Vdc	Input: DC 48V Output: 5 – 28Vdc	Input: DC 48V Output: 1.2 – 28Vdc
<b>Warranty</b>	5 years	3 years	3 years	3 years	3 years

### Non-isolated DC-DC Converters

	iAH/iBH/iCH	i3A	i6A	i7A <b>NEW MODELS</b>	i7C <b>NEW MODELS</b>
					
<b>Package</b>	0.48x0.48", 0.8x0.45", 1.3x0.53"	1/32 Brick	1/16 Brick	1/16 Brick pin-out	1/16 Brick pin-out
<b>Topology</b>	Buck	Buck	Buck, inverter	Buck	Buck-boost
<b>Output</b>	3, 5, 6, 12, 20, 40A	4.5, 8A	8, 10, 14, 20A	33, 45A	8, 12.5, 20A
<b>Features</b>	Input: DC 5, 12V Output: 0.6 – 8.5Vdc	Input: DC 12, 24V Output: 3.3 – 30Vdc	Input: DC 12, 24, 48V Output: 3.3 – 40Vdc	Input: DC 24, 48V Output: 3.3 – 24Vdc	Input: DC 12, 24, 48V Output: 3.3 – 24Vdc
<b>Warranty</b>	3 years	3 years	3 years	3 years	3 years

### EMC-Line Filters

	RS/RT	SIFI	IEC	FQA/FQB
				
<b>Current</b>	0.5 – 1000A	3 – 36A	1 – 20A	20A
<b>Voltage</b>	250, 500V	250V	250V	+/-40V
<b>Features</b>	1-phase, 3-phase conform to ENEC, UL, CSA, RoHS low leakage	1-phase conform to UL, CSA, ENEC compact size	1-phase conform to UL, CSA, ENEC	Harsh Environment
<b>Warranty</b>	5 years	1 years	1 years	3 years

PY <b>NEW SERIES</b>	CN <b>NEW MODELS</b>	PAH	PAF
1x1", 1/4 Brick, 1/2 Brick	1/4 Brick, 1/2 Brick	1/2 Brick	Full Brick
20, 50, 75, 200W	30, 50, 100, 200, 300W	300, 350, 450W	504, 600, 700W
Input: DC 24, 36, 48, 72, 96, 110V Output: 3.3 – 15Vdc Single, dual outputs	Input: DC 24, 110V Output: 5 – 24Vdc	Input: DC 24, 48V Output: 12 – 48Vdc	Input: DC 24, 48V Output: 12 – 28Vdc
3 years	5 years	2 years	2 years

Bi-directional DC-DC		
<b>DPX</b>	<b>Vega</b>	<b>EZA</b>
DIN-Rail	Modular design	19-inch Rack 1U
15, 20, 30, 40, 60W	370-450W	2500, 11.000W
Input: DC 12, 24, 48V Output: 3.3 – 15Vdc Single, dual, tripple outputs	Input: DC 48V Output: 1.8 – 56Vdc 1-11 Outputs	Bi-directional DC 320V <-> 48V (2.5kW) DC 320V <-> 240V (11kW)
3 years	3 years	5 years

<b>RGA <b>NEW SERIES</b></b>	<b>CHVM</b>	<b>DDA <b>NEW SERIES</b></b>
1.4x1.4" Die cast	Various sizes (SIL)	DIN-Rail
Buck	Capacitive converter	Buck, inverter
10, 14, 20A	1.4 – 3W	250, 325, 500W
Input: DC 12, 24, 48V Output: 3.3 – 40Vdc	Input 12VDC Output 180 – 2000VDC	Input: DC 12, 24, 48V Output: 3.3 – 24Vdc Single, dual outputs
3 years	1 years	3 years

<b>iDQ</b>	<b>RDEN</b>
10A	50A
up to 75V	46V
Exceptional differential mode performance	Metal case stud terminals
3 years	1 years

TDK-Lambda custom power solutions include full bespoke designs, modified standards and 'brick on board' products. Our expertise is vast, covering 0.6V to 50kV, 1W to 50kW AC-DC and DC-DC.

#### Modified standard

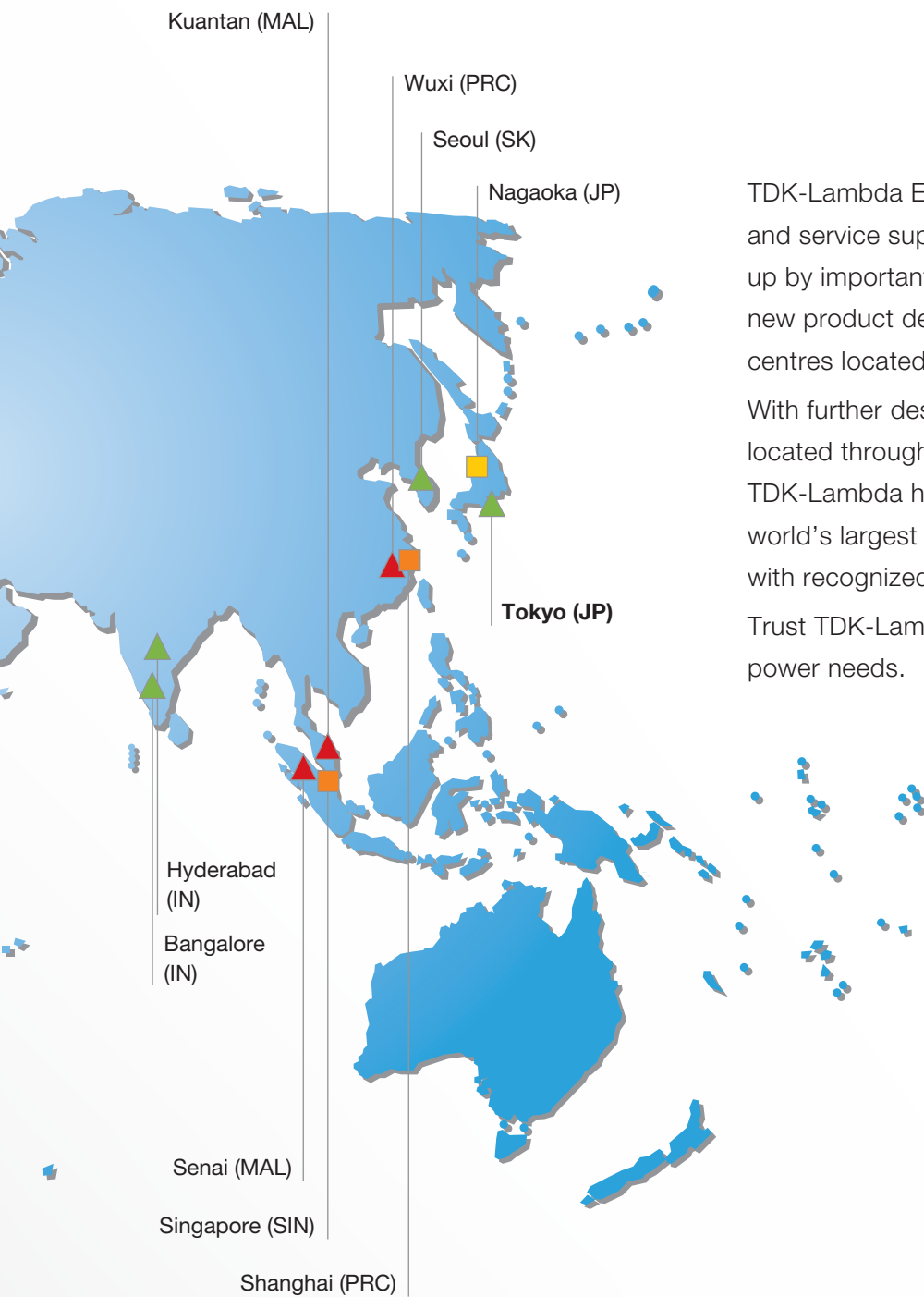
- A slight modification (electrical and physical) to a standard TDK-Lambda product
- Customized mechanical housing (chassis)
- Filter solutions for input and output
- Additional function and communication/signals
- Non standard voltages
- Cable looms and connectors
- Ruggedisation for shock, vibration, high g and outdoor environments
- Brick on board
- Custom designs utilising our broad range of AC-DC and DC-DC power modules. Benefits include low NRE and fast time to market.

#### Full custom design to customer specification

A power supply designed to meet the customer's unique set of requirements.

# Global Operations





TDK-Lambda EMEA offer responsive local sales and service support throughout EMEA backed up by important Advanced Technology Research, new product development and manufacturing centres located in EMEA.

With further design and manufacturing centres located throughout Asia and North America, TDK-Lambda has positioned itself as one of the world's largest manufacturers of power supplies with recognized leadership.

Trust TDK-Lambda for all your healthcare power needs.

Our team of experts will be happy to help you find the best power supply for your application.



**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



**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**

**SOS electronic** distribution of electronic components

**SK: SOS electronic s.r.o., Pri prachárni 16, 040 11 Košice**  
Tel.: +421 55 786 04 15 www.soselectronic.sk

**CZ: SOS electronic s.r.o., Edisonova 3023/5, 612 00 Brno**  
Tel.: +420 543 427 111, www.soselectronic.cz

**HU: SOS electronic Kft., József Attila út 74, 3527 Miskolc**  
Tel.: +36 46 501 380, www.soselectronic.hu

**PL: SOS electronic, ul. Tatarskiewicza 17, 92-753 Łódź**  
Tel.: +48 42 203 23 94, www.soselectronic.pl

**DE: SOS electronic GmbH, Klaus-Conrad-Str.1, 92242 Hirschau**  
Tel.: +49 (0) 9622 6091 690, www.soselectronic.de