

Healthcare

Power Supplies



TDK-Lambda
Trusted • Innovative • Reliable

The heart of your medical 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.

TDK-Lambda is one of the oldest and most trusted manufacturers of high quality healthcare power supply solutions used in critical medical and laboratory applications.

This brochure will provide you with our medically certified power supplies and service and shows why leading manufacturers and OEM clients for medical applications rely on TDK-Lambda solutions.

www.emea.lambda.tdk.com



Healthcare Power Supply Solutions worldwide

Medical applications require high reliability and high quality solutions. TDK-Lambda, as a world-leading supplier of high quality healthcare power supplies, serves this demand with extensive experience, multiple certifications and medical power supplies tested and approved to the highest safety standards. Backed by industry leading warranties, our motivation is complete customer satisfaction.

Wide choice of highly reliable Medical Power Supply Solutions

TDK-Lambda offers an extensive product line of healthcare power supplies with over 5.000 models of medical power supplies to choose from. The range of highly reliable healthcare power supplies covers power levels from 3W to 2,000W.

- AC-DC power supplies
- DC-DC converters
- EMC/EMI Filters
- Standard, modified Power+ Solutions and full custom designs

TDK-Lambda ranked as #1 supplier within the Medical and the Industrial sector across AC-DC and DC-DC Merchant Power Supply revenues market.



OMDIA 2020

Designed for highly reliability with excellent stability for long service life

Using high quality power supplies enables medical equipment to provide years of continuous, reliable operation. TDK-Lambda designs and manufactures products in ISO 13485 certified facilities to fully comply with the demands of the IEC 60601-1 safety standards. In addition, rigorous testing and careful attention to component temperatures ensures our products will offer trouble-free service and increase the reliability of customers' system.

- Products suitable for B & BF equipment
- Class I & Class II products
- IEC60601-1 approvals as standard
- Altitudes up to 5.000 meters
- Industry leading warranties
- Leading compact sizes
- Very long peak power times
- Prolonged product lifetime

Access our expertise

Our expertise is based on 30+ years of experience powering healthcare products for major medical OEMs. Customers can receive assistance and advice for medical power supply selection, application support, medical safety compliance and custom solutions.

- Approved supplier to most top global medical device companies
- Global multi-site design, manufacture and technical support centers.

Medical Safety Approvals

TDK-Lambda is certified and approved to design and manufacture power supplies for medical applications using its own testing facilities to generate UL and CB safety reports and test data. The medical power supplies from TDK-Lambda are approved to the latest medical safety standards and meet with Edition 4 EMC compliance requirements.

- ISO13485 designed and manufactured products
- IEC, UL, CSA, ANSI/AAMI ES 60601-1 safety compliance
- EN60601-1-2:2015 (Edition4) EMC compliance
- In-house testing facilities to generate UL and CB safety reports and test data



Applications

TDK-Lambda's medical power supply portfolio is used in a broad range of applications by most of the world's major OEMs. Our low noise outputs enable large complex imaging equipment to produce higher resolution scans. Smaller products charge batteries for surgical tools or power medical chairs and beds. Multiple output, modular supplies are used in analysers, lab equipment and even robotic surgery. Medical lasers rely on the stable output voltages our products provide for precise surgical and cosmetic procedures.

Clinical

- Dialysis Equipment
- Ophthalmology Devices
- Patient Monitoring & Therapy
- Surgical & Ablation Systems
- Medical Beds
- Surgical Lasers
- Neonatal Care
- Electrocardiographs
- Anesthesia Devices
- Endoscopes
- Radiotherapy
- Infusion pumps
- ECG
- Robotics
- Ventilators
- Cosmetic Lasers
- Powered tools
- Operating Theatre lighting

Dental

- CAD/CAM Systems
- Oral Care Equipment
- X-Ray Machines
- Gamma Imaging Systems
- Digital Radiography
- Chairs





Laboratory

- Microbiology
- Electron Microscopes
- Chemical Analysis Equipment
- Lab Process Automation
- Immunoassay Systems
- Mass Analyzers
- In-Vitro Diagnostics
- Sterilization
- Clinical Chemistry
- Centrifuges
- PCRs
- Osmometers
- Blood analysers
- DNA Testers
- VHP Systems
- Bioreactors
- Mixing systems



Imaging

- X-Ray Machines
- Ultrasound Scanners
- Single Photon Emission Computed Tomography (SPECT)
- Positron Emission Tomography (PET)
- Computed Tomography (CT) Scan
- Magnetic Resonance Imaging (MRI)

Homecare

- Oxygen therapy
- Nebulizers
- Portable dialysis
- Telehealth
- Respirators



Surgical Robots

- General Surgery
- Catheter & Endoscope navigation
- Robotics positioning of surgical tools
- Robotics system for intra operative camera

Cosmetic surgery

– Medical Laser Treatments:

- Hair Removal
- Skin Treatments
- Cellulite Treatment
- Tattoo Removal

– Surgical Treatments:

- ENT
- Liposuction
- Skin Tightening
- Varicose veins



Medical Power Supplies

Explore our products and see why TDK-Lambda leads the market in medical power solutions.

QM Series

Configurable AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Suitable for B and BF rated equipment (MOPP)
- Protection Class I
- Flexible with many output combinations
- Low speed, low audible noise fan
- Option: PMBus™ communication



PMBus

www.emea.lambda.tdk.com/qm



	Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Standby supply
NEW	QM4	550 – 650W	1 – 10	2.8 – 105.6Vdc	90 – 264Vac	7 years		optional 5V or 12V
	QM5	700 – 800W	1 – 12	2.8 – 105.6Vdc	90 – 264Vac	7 years		optional 5V or 12V
	QM5H	700 – 1200W	1 – 12	2.8 – 105.6Vdc	90 – 264Vac	7 years		optional 5V or 12V
	QM7	1200 – 1500W	1 – 16	2.8 – 105.6Vdc	90 – 264Vac	7 years		optional 5V or 12V
	QM8	1200 – 1500W	1 – 18	2.8 – 105.6Vdc	90 – 264Vac	7 years		optional 5V or 12V
NEW	QM8B	1200 – 2000W	1 – 18	2.8 – 105.6Vdc	90 – 264Vac	7 years		optional 5V or 12V

*including auxiliary outputs

Vega Series

Configurable AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Protection Class I
- Power density 5.8W/cu in
- 1-10 fixed or adjustable modular o/ps
- Output voltages - 1.8-64 V full overlap
- Output current - 1A-120A
- Cooling system - air/end fan/reverse fan
- Signal options - mains fail, global inhibit, output good, output inhibit



www.emea.lambda.tdk.com/vega



	Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Standby supply
	Vega-Lite 550	550W	1 – 11	1.8 – 56Vdc	90 – 264Vac	3 years		Optional 5V
	Vega-Lite 750	750 – 900W	1 – 11	1.8 – 56Vdc	90 – 264Vac	3 years		Optional 5V
	Vega 450	450W	1 – 11	0.25 – 62Vdc	90 – 264Vac	3 years		Optional 5V or 12V
	Vega 650	650W	1 – 11	0.25 – 62Vdc	90 – 264Vac	3 years		Optional 5V or 12V
	Vega 900	650-900W	1 – 11	0.25 – 62Vdc	90 – 264Vac	3 years		Optional 5V or 12V

*including auxiliary outputs

CM4 Series

Configurable AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Protection Class I
- Flexible with many output combinations
- Wide output adjustment
- Remote programming of voltage and current
- Compact 4 x 7 inch size
- MIL-STD-461F compliant



www.emea.lambda.tdk.com/cm4



Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Standby supply
CM4**	600W	1 – 5	1.5 – 232Vdc	85 – 264Vac	5 years		5V

*including auxiliary outputs **Not sold through TDK-Lambda distribution network

QS Series

Single output AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Suitable for B and BF rated equipment (MOPP)
- Protection Class I
- Low speed, low audible noise fan
- Dual or single fusing
- Option: PMBus™ communication



PMBus

www.emea.lambda.tdk.com/qs



	Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Standby supply
NEW	QS4	600W	3	12, 24, 48Vdc	90 – 264Vac	7 years		optional 5V or 12V
	QS5	600W	3	12, 24, 48Vdc	90 – 264Vac	7 years		optional 5V or 12V
	QS5H / QS7	1080 – 1200W	3	12, 24, 48Vdc	90 – 264Vac	7 years		optional 5V or 12V

*including auxiliary outputs

NVM Series

Configurable AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Suitable for B and BF rated equipment (MOPP)
- Protection Class I
- High efficiency
- High power density
- Up to 8 configurable outputs
- No minimum load
- Fits 1U applications



www.emea.lambda.tdk.com/uk/nvm



Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Standby supply
NVM175	175W	1 – 2	5, 12, 24Vdc	90 – 264Vac	3 years		5V or 12V

*including auxiliary outputs

NV Series

Configurable AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Protection Class I
- High efficiency
- High power density
- No minimum load
- Fits 1U applications
- Up to 5 configurable outputs



www.emea.lambda.tdk.com/nvmodular



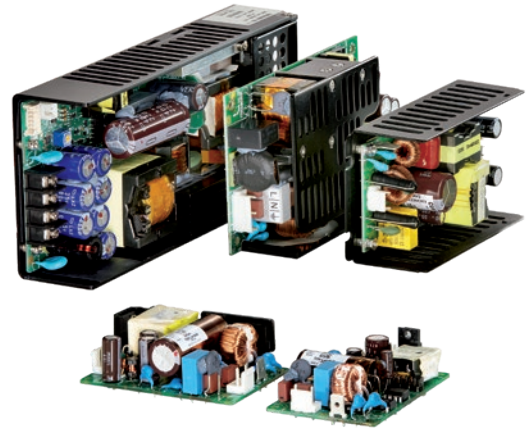
Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Standby supply
NV175	175W	1 – 5	0.9 – 28Vdc	90 – 264Vac	3 years		Optional 5V or 12V
NV175M	175W	1 – 3	3.3 – 28Vdc	90 – 264Vac	3 years		N/A
NV350	350W	1 – 6	3.2 – 64Vdc	90 – 264Vac	3 years		Optional 5V or 12V
NV700	700W	1 – 8	3.2 – 64Vdc	90 – 264Vac	3 years		Optional 5V or 12V

*including auxiliary outputs

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)
- Models suitable for Class I and Class II installations
- Peak power ratings up to 30 minutes (CUS400M), up to 1000W (CUS350MP-1000)
- Class B conducted and radiated EMI
- High efficiency up to 94%



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	~ ↓ * III
CUS150M	150W	12, 15, 18, 24, 28, 36, 48Vdc	85 – 264Vac	2x4"	Open frame, U-channel, baseplate, enclosed, enclosed with top fan	5 years	~ ↓ * III
CUS200M	200 – 250W	12, 18, 24, 36, 48Vdc	85 – 265Vac	3x5"	Open frame, L bracket, enclosed	3 years	~ ↓
CUS350M	350 – 420W	12, 18, 24, 36, 48Vdc	85 – 265Vac	3.4x7.5"	U-channel, enclosed	3 years	~ ↓
NEW CUS350MP	350 – 1000W	24, 48Vdc	85 – 265Vac	3.46x7.2"	Open frame, enclosed	5 years	~ ↓
NEW CUS400M	400W	12, 15, 19, 24, 28, 36, 48Vdc	85 – 264Vac	3x5"	Open frame, baseplate, U-channel, enclosed, enclosed with top fan	5 years	~ ↓ * III
NEW 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	*

GXE600 Series

High reliability CVCC AC-DC power supply

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Suitable for B and BF rated equipment (MOPP)
- Protection Class I
- Ultra high efficiency up to 95%
- CV, CC mode
- Programmable by Modbus RTU/RS-485
- Intelligent monitoring – E-Caplife forecast accumulated operating time, internal temperature, failure analysis
- 5V 1A standby
- Ruggedisation & pcb coating option (/HD)



www.emea.lambda.tdk.com/gxe600

Model	Output power	Output voltage	Input voltage	Warranty	Cooling
GXE600	600W	24V & 48Vdc	85 – 265Vac	7 years	↓

RWS-B/ME Series

General AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Suitable for B and BF rated equipment (MOPP)
- Protection Class I
- 10 year e-cap lifetime
- Global Safety Approvals
- Compact size
- 7 year warranty



www.emea.lambda.tdk.com/rwsb



Model	Output power	Output voltage	Input voltage	Warranty	Cooling
RWS1000B/ME	1000W	12, 15, 24, 36, 48Vdc	85 – 265Vac	7 years	
RWS1500B/ME	1500W	12, 15, 24, 36, 48Vdc	85 – 265Vac	7 years	

HWS-/ME Series

General AC-DC power supplies

- Safety Certification IEC/EN/UL 60601-1
- Protection Class I
- Limited lifetime warranty*
- Universal input (85 - 265VAC)
- High efficiency
- Broad 30W to 1500W product range



www.emea.lambda.tdk.com/hws



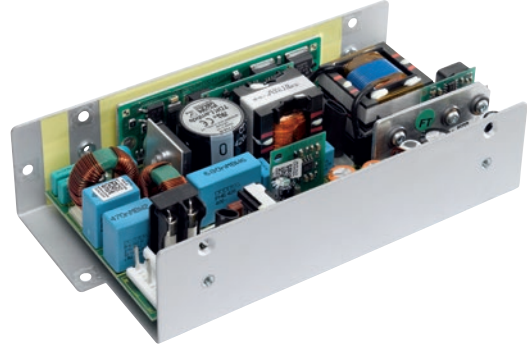
Model	Output power	Output voltage	Input voltage	Warranty	Cooling
HWS-A/ME	30 – 150W	3.3, 5, 12, 15, 24, 48Vdc	85 – 265Vac	Leading warranty*	
HWS300-1500/ME	300 – 1500W	13.3, 5, 6, 7.5, 12, 15, 24, 36, 48, 60Vdc	85 – 265Vac	Leading warranty*	

*Visit our website for more information about leading (limited lifetime) warranty

EFE/M Series

Configurable AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Suitable for B and BF rated equipment (MOPP)
- Protection Class I
- High efficiency
- Digital control
- EFE300-M: 6x3" footprint
- EFE400-M: 6.5x3.5" footprint
- High power density (up to 18W/in³)
- No minimum load
- Fits 1U applications
- EFE300-M: 400W peak power for 10 seconds
- EFE400-M: 530W peak power for 10 seconds



www.emea.lambda.tdk.com/efe



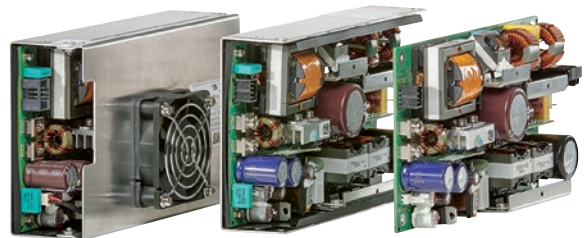
Model	Output power	Number of outputs*	Output voltage	Input voltage	Warranty	Cooling	Standby supply
EFE300M	300W	1 – 2	12, 24, 28, 48, 50Vdc	90 – 264Vac	5 years		5V or 12V
EFE400M	400W	1 – 2	12, 24, 48Vdc	90 – 264Vac	5 years		5V or 12V

*including auxiliary outputs

XMS500 Series

Configurable AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Suitable for B and BF rated equipment (MOPP)
- Protection Class I or II options
- Flexible with many case and signal options
- Suitable for 1U profile
- Low airflow requirement
- EN55011/22 Class B (conducted and radiated)



www.emea.lambda.tdk.com/xms



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

SWS1000-L Series

General AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Protection Class I
- Programmable output voltage
- Parallel capable
- Active power factor correction
- Variable speed fan
- Operation up to 75°C



www.emea.lambda.tdk.com/sws



Model	Output power	Output voltage	Input voltage	Warranty	Cooling
SWS1000L	1000W	3 – 60Vdc	85 – 265Vac	3 years	

CUT35 Series

General AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Protection Class I
- Triple (useable as dual) output supply
- Compact (2x4" footprint)
- Low profile
- High efficiency 85%
- Output 1 isolated from outputs 2 & 3
- Cover & baseplate options
- No minimum load
- Cover option (/A)



www.emea.lambda.tdk.com/cut



Model	Output power	Output voltage	Input voltage	Warranty	Cooling
CUT35	35W	5/±12, 5/±15, 5/24, 5/30Vdc	85 – 265Vac	3 years	

ZMS100 Series

General AC-DC power supplies

- Safety Certifications IEC/EN/UL 60601-1, 60950-1, 62368-1
- Suitable for B and BF rated equipment (MOPP)
- Protection Class I and Class II installations
- 80W convection, 100W forced-air cooled
- Long e-cap lifetime
- Compact 2 x 4 inch footprint
- Ceramic start-up cap



www.emea.lambda.tdk.com/zms



Model	Output power	Output voltage	Input voltage	Warranty	Cooling
ZMS100	100W	12, 15, 24, 36, 48Vdc	85 – 264Vac	3 years	

DTM Series

Desktop power supplies

- Safety Certifications 60601-1, 60601-1-11 and 62368-1 model dependant
- Suitable for B and BF rated equipment
- Protection Class I or II
- ErP tier 2 and DOE Level VI compliant models
- Wide range AC input



www.emea.lambda.tdk.com/dtm



Model	Output power	Output voltage	Warranty	Average efficiency	No load power	Protection Class
DTM36	25 – 30W	5, 9, 12, 13.5, 15, 18, 24, 36, 48Vdc	3 years	85 – 88%	<0.075W	II
DTM65-D	40 – 65W	5, 12, 15, 19, 24, 28, 36, 48Vdc	3 years	>89%	<0.15W	I
DTM65-C8	40 – 65W	5, 12, 15, 19, 24, 28, 48Vdc	3 years	>88%	<0.21W	II
DTM110-C	105 – 110W	12, 13.5, 15, 19, 20, 24Vdc	2 years	>89%	<0.15W	I
DTM110-C8	105 – 110W	12, 15, 19, 24, 28, 36, 48Vdc	3 years	>89%	<0.15W	II
DTM165	160 – 165W	12, 15, 19, 24, 28, 36, 48Vdc	2 years	>87%	<0.5W	I
DTM250	250W	12, 19, 24, 28, 36, 48, 54Vdc	3 years	>89%	<0.15W	I
DTM300	300W	12, 15, 19, 24, 28, 48, 54Vdc	3 years	>88%	<0.5W	I & II

WMM30 Series

Wall mount power supplies

- Safety Certifications 60601-1 and 60601-1-11
- Suitable for B and BF rated equipment
- Protection Class II
- ErP tier 2 and DOE Level VI compliant models
- Wide range AC input



www.emea.lambda.tdk.com/wmm

Model	Output power	Output voltage	Warranty	Average efficiency	No load power
WMM30	25 – 30W	5, 9, 12, 15, 18, 24Vdc	3 years	85 – 87.7%	<0.075W

KMS-A Series

PCB mount power supplies

- Safety Certifications 60601-1 and 62368-1
- Suitable for B and BF rated equipment
- Protection Class II
- I/O isolation 4KVAC, 2 x MOPP
- Low off-load power draw



www.emea.lambda.tdk.com/kms-a

Model	Output power	Output voltage	Warranty	Average efficiency	No load power
KMS15A	15W	5, 9, 12, 15, 24Vdc	3 years	79 – 85%	<0.1W
KMS30A	30W	5, 9, 12, 15, 24Vdc	3 years	84 – 86%	<0.15W
KMS60A	60W	5.1, 9, 12, 15, 24Vdc	3 years	86 – 87%	<0.3W

PX-M Series

Isolated enclosed PCB mount DC-DC converter

- Safety Certifications IEC 60601-1 and IEC 62368-1
- 2 x MOPP Isolation
- Wide 4:1 input range
- Compact industry packages
- Low no load power consumption



www.emea.lambda.tdk.com/px-m

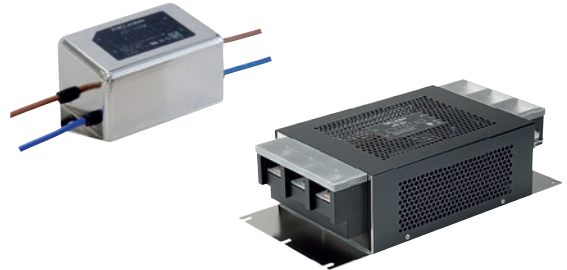


Model	Output power	Output voltage	Dimensions / Format	Warranty	Cooling
PXC-M03 (S)	3W	3.3, 5, 12, 15, 24Vdc	DIP-24 Package	5 years	↓
PXC-M03 (D)	3W	±5, ±12, ±15, 10, 24, 30Vdc	DIP-24 Package	5 years	↓
PXC-M06 (S)	6W	3.3, 5, 12, 15, 24Vdc	DIP-24 Package	5 years	↓
PXC-M06 (D)	6W	±5, ±12, ±15, 10, 24, 30Vdc	DIP-24 Package	5 years	↓
PXC-M10 (S)	10W	3.3, 5, 12, 15, 24Vdc	DIP-24 Package	5 years	↓
PXC-M10 (D)	10W	±5, ±12, ±15, 10, 24, 30Vdc	DIP-24 Package	5 years	↓
PXG-M15 (S)	15W	5, 12, 15, 24Vdc	1.6x1"	5 years	↓
PXG-M15 (D)	15W	±5, ±12, ±15, 10, 24, 30Vdc	1.6x1"	5 years	↓
PXG-M20 (S)	20W	5, 12, 15, 24Vdc	1.6x1"	5 years	↓
PXG-M20 (D)	20W	±5, ±12, ±15, 10, 24, 30Vdc	1.6x1"	5 years	↓
PXD-M30 (S)	30W	5, 12, 15, 24Vdc	2x1"	5 years	↓
PXD-M30 (D)	30W	±5, ±12, ±15, 10, 24, 30Vdc	2x1"	5 years	↓

RS Series

EMI Filters

- Extensive range of product
- Single phase input
- RoHS Compliant
- Conforms to ENEC, UL and cUL Certifications
- Low leakage current



www.emea.lambda.tdk.com/rs



Model (xx/L)	Description	Input voltage	Rated current	Leakage current@250Vac, 60 Hz
RSAL-20xx/L	Chassis Mount	250Vac	0.5 – 6A	10 μ A
RSEL-20xx/L	Chassis Mount	250Vac	0.5 – 6A	10 μ A
RSAN-20xx/L	Chassis Mount, DIN rail optional	250Vac	3 – 30A	10 μ A
RSEN-20xx/L	Chassis Mount, DIN rail optional	250Vac	3 – 30A	10 μ A
RSHN-20xx/L	Chassis Mount, DIN rail optional	250Vac	3 – 30A	10 μ A
RSMN-20xx/L	Chassis Mount, DIN rail optional	250Vac	3 – 30A	10 μ A

SIFI Series

EMI Filters

- Compact size
- Available from 3A to 36A at 250Vdc/ac
- Approvals: UL, CSA and ENEC
- Suitable for many applications including medical and testing devices



www.emea.lambda.tdk.com/sifi



Model (xxM)	Description	Input voltage	Rated current	Leakage current@250Vac, 60 Hz
SIFI F	Chassis Mount	250Vac	3 – 36A	<2 μ A
SIFI G	Chassis Mount	250Vac	3 – 36A	0 μ A
SIFI H	Chassis Mount	250Vac	3 – 36A	0 μ A

IEC Series

EMI Filters

- Conforms to ENEC, UL and cUL Certifications
- Easy to install
- Compact size
- Optional modular fuse holder and switch
- Available from 1A to 20 A at 250Vdc/ac



www.emea.lambda.tdk.com/iec



Model (xxM)	Description	Input voltage	Rated current	Leakage current@250Vac, 60 Hz
B84771 / M	IEC-Filter	250Vac	1 – 20A	2 μ A
B84773 /M	IEC-Filter with fuse	250Vac	1 – 10A	2 μ A
B84776 /M	IEC-Filter with fuse and switch	250Vac	1 – 10A	2 μ A

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

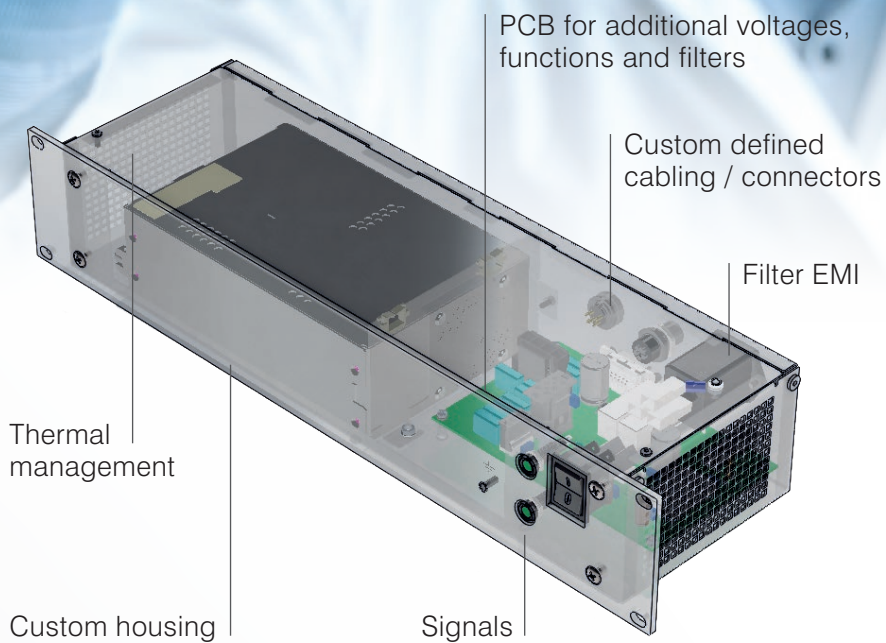


+ brick on board

+ cable

+ Non standard voltage

+ logistic support



Product Overview

AC-DC						
Product Series	Description	Output power [W]	Outputs	Output voltage [Vdc]	Protection Class	Cooling
KMS15A	Enclosed - PCB Mount	15	1	5, 9, 12, 15, 24	Class II	
KMS30A	Enclosed - PCB Mount	25 - 30	1	5, 12, 15, 24	Class II	
KMS60A	Enclosed - PCB Mount	51 - 60	1	5.1, 9, 12, 15, 24	Class II	
CUT35	Open frame	35	2, 3	5/±12, 5/±15, 5/24, 5/30	Class I	
CUS30M	Open frame, enclosed	30	1	12, 24, 48	Class I & Class II	
CUS60M	Open frame, enclosed	60	1	5, 12, 15, 18, 24, 48	Class I & Class II	
CUS100ME	Open frame, U-channel, baseplate, enclosed	100	1	12, 15, 18, 24, 28, 36, 48	Class I & Class II	
CUS150M	Open frame, U-channel, baseplate, enclosed, enclosed with top fan	120 - 150	1	12, 15, 18, 24, 28, 36, 48	Class I & Class II	
CUS200M	Open frame, L-bracket, enclosed	200 - 250	1	12, 18, 24, 36, 48	Class I	
CUS350M	U-channel, enclosed	350 - 420	1	12, 18, 24, 36, 48	Class I	
CUS350MP	Open frame, enclosed	350 - 1000	1	24, 48	Class I	
CUS400M	Open frame, U-channel, baseplate, enclosed, enclosed with top fan	400	1	12, 15, 19, 24, 28, 36, 48	Class I & Class II	
CUS600M	Open frame, enclosed with end fan	600	1	12, 19, 24, 28, 32, 36, 48	Class I & Class II	
CUS1500M	Enclosed	1500	1	12, 15, 24, 36, 48	Class I	
ZMS100	Open frame	100	1	12, 15, 24, 36, 48	Class I & Class II	
NV175	Open frame (configurable)	175 - 180	1 - 5	0.9 - 28	Class I	
NVM175	Open frame (configurable)	180	1	12, 24	Class I	
NV175-M	Open frame (configurable)	180	1 - 3	3.3 - 28	Class I	
EFE300M	Open frame	300	1	12, 24, 28, 48, 50	Class I	
NV350	Enclosed - End fan (configurable)	350 - 660	1 - 6	3.2 - 64	Class I	
EFE400M	Open frame	400	1	12, 24, 48	Class I	
XMS500/A (N)	Open frame	500	1	12, 24, 36, 48	Class I or Class II	
XMS500/A (S)	U-Channel	500	1	12, 24, 36, 48	Class I or Class II	
XMS500/A (TF)	Enclosed - Top fan	500	1	12, 24, 36, 48	Class I or Class II	
CM4	Open frame (configurable)	425 - 600	1 - 4	1.5 - 232	Class I	
Vega	Enclosed - End fan (configurable)	450 - 900	1 - 10	0.25 - 62 (0.25-60)	Class I	
Vega-Lite	Enclosed - End fan (configurable)	550 - 900	1 - 11	1.8 - 56	Class I	
NV700	Enclosed - End fan (configurable)	700 - 1150	1 - 8	3.2 - 64	Class I	
GXE600	U-frame- Enclosed	600	1	24, 48	Class I	
HWS /ME	U-frame, Enclosed - End fan	30 - 1500	1	3.3, 5, 6, 7.5, 12, 15, 24, 36, 48, 60	Class I	
SWS-L	Enclosed - End fan	1000	1	3.3, 5, 12, 15, 24, 36, 48, 60	Class I	
RWS1000B/ME	Enclosed - End fan	1000	1	12, 15, 24, 36, 48	Class I	
QS4 - QS7	Enclosed - End fan	600 - 1200W	1	12, 24, 48	Class I	
QM4	Enclosed - End fan (configurable)	550 - 650	1 - 10	2.8 - 105.6	Class I	
QM5	Enclosed - End fan (configurable)	700 - 1200	1 - 12	2.8 - 105.6	Class I	
QM7	Enclosed - End fan (configurable)	1200 - 1500	1 - 16	2.8 - 105.6	Class I	
QM8	Enclosed - End fan (configurable)	1200 - 1500	1 - 18	2.8 - 105.6	Class I	
QM8B	Enclosed - End fan (configurable)	1200 - 2000	1 - 18	2.8 - 105.6	Class I	
RWS1500B/ME	Enclosed - End fan	1500	1	12, 15, 24, 36, 48	Class I	

AC-DC External / Desktop

Product Series	Description	Output power [W]	Outputs	Output voltage [Vdc]	Dimensions [WxLxH]	Protection Class	Cooling
DTM36-C8	External adapter	25 – 36	1	5, 9, 12, 13.5, 15, 18, 24, 36, 48	2.36 x 4.17 x 1.22"	Class II	↓
DTM65-C8	External adapter	40 – 65	1	5, 12, 15, 19, 24, 28, 48	2.36 x 4.17 x 1.22"	Class II	↓
DTM65-D	External adapter	40 – 65	1	5, 12, 15, 19, 24, 36, 48	2.72 x 5.2 x 1.57"	Class I	↓
DTM110-C	External adapter	90 – 110	1	12, 13.5, 15, 19, 20, 24	2.55 x 6.7 x 1.51"	Class I	↓
DTM110-C8	External adapter	105 – 110	1	12, 15, 19, 24, 28, 36, 48	2.48 x 5.5 x 1.29"	Class II	↓
DTM165-C	External adapter	160 – 165	1	12, 15, 19, 24, 28, 36, 48	3.35 x 6.7 x 1.73"	Class I	↓
DTM250-D	External adapter	250	1	12, 19, 24, 28, 36, 48, 54	3.54 x 7.87 x 1.77"	Class I	↓
DTM300-D	External adapter	300	1	12, 15, 19, 24, 28, 48, 54	4.4 x 8.75 x 1.77"	Class I or Class II	↓
WMM30	Wall mount	25 – 30	1	5, 9, 12, 15, 18, 24	2.28 x 3.8 x 1.7	Class II	↓

DC-DC

Product Series	Description	Output power [W]	Outputs	Output voltage [Vdc]	Dimensions [WxLxH]	Cooling
PXC-M03 (S)	Isolated PCB Mount	3	1	3.3, 5, 12, 15, 24	1.25 x 0.8 x 0.4"	↓
PXC-M03 (D)	Isolated PCB Mount	3	2	±5, ±12, ±15, 10, 24, 30	1.25 x 0.8 x 0.4"	↓
PXC-M06 (S)	Isolated PCB Mount	6	1	3.3, 5, 12, 15, 24	1.25 x 0.8 x 0.4"	↓
PXC-M06 (D)	Isolated PCB Mount	6	2	±5, ±12, ±15, 10, 24, 30	1.25 x 0.8 x 0.4"	↓
PXC-M10 (S)	Isolated PCB Mount	10	1	3.3, 5, 12, 15, 24	1.25 x 0.8 x 0.4"	↓
PXC-M10 (D)	Isolated PCB Mount	10	2	±5, ±12, ±15, 10, 24, 30	1.25 x 0.8 x 0.4"	↓
PXG-M15 (S)	Isolated PCB Mount	15	1	5, 12, 15, 24	1.6 x 1 x 0.4"	↓
PXG-M15 (D)	Isolated PCB Mount	15	2	±5, ±12, ±15, 10, 24, 30	1.6 x 1 x 0.4"	↓
PXG-M20 (S)	Isolated PCB Mount	20	1	5, 12, 15, 24	1.6 x 1 x 0.4"	↓
PXG-M20 (D)	Isolated PCB Mount	20	2	±5, ±12, ±15, 10, 24, 30	1.6 x 1 x 0.4"	↓
PXD-M30 (S)	Isolated PCB Mount	30	1	5, 12, 15, 24	2 x 1 x 0.4"	↓
PXD-M30 (D)	Isolated PCB Mount	30	2	±5, ±12, ±15, 10, 24, 30	2 x 1 x 0.4"	↓

Filters for medical applications

Product Series	Medical product code (_xx)	Description	Input voltage [Vac]	Rated Current [A]	Cooling
RSAL-20xx	/L	Chassis Mount	250	0.5 – 6	↓
RSEL-20xx	/L	Chassis Mount	250	0.5 – 6	↓
RSAN-20xx	/L	Chassis Mount, Din rail optional	250	3 – 30	↓
RSEN-20xx	/L	Chassis Mount, Din rail optional	250	3 – 30	↓
RSHN-20xx	/L	Chassis Mount, Din rail optional	250	3 – 30	↓
RSMN-20xx	/L	Chassis Mount, Din rail optional	250	3 – 30	↓
SIFI F	M	Chassis Mount	250	3 – 36	↓
SIFI G	M	Chassis Mount	250	2 – 36	↓
SIFI H	M	Chassis Mount	250	3 – 36	↓
B84771	M	IEC-Filter	250	1 – 20	↓
B84773	M	IEC-Filter with fuse	250	1 – 10	↓
B84776	M	IEC-Filter with fuse and switch	250	1 – 10	↓

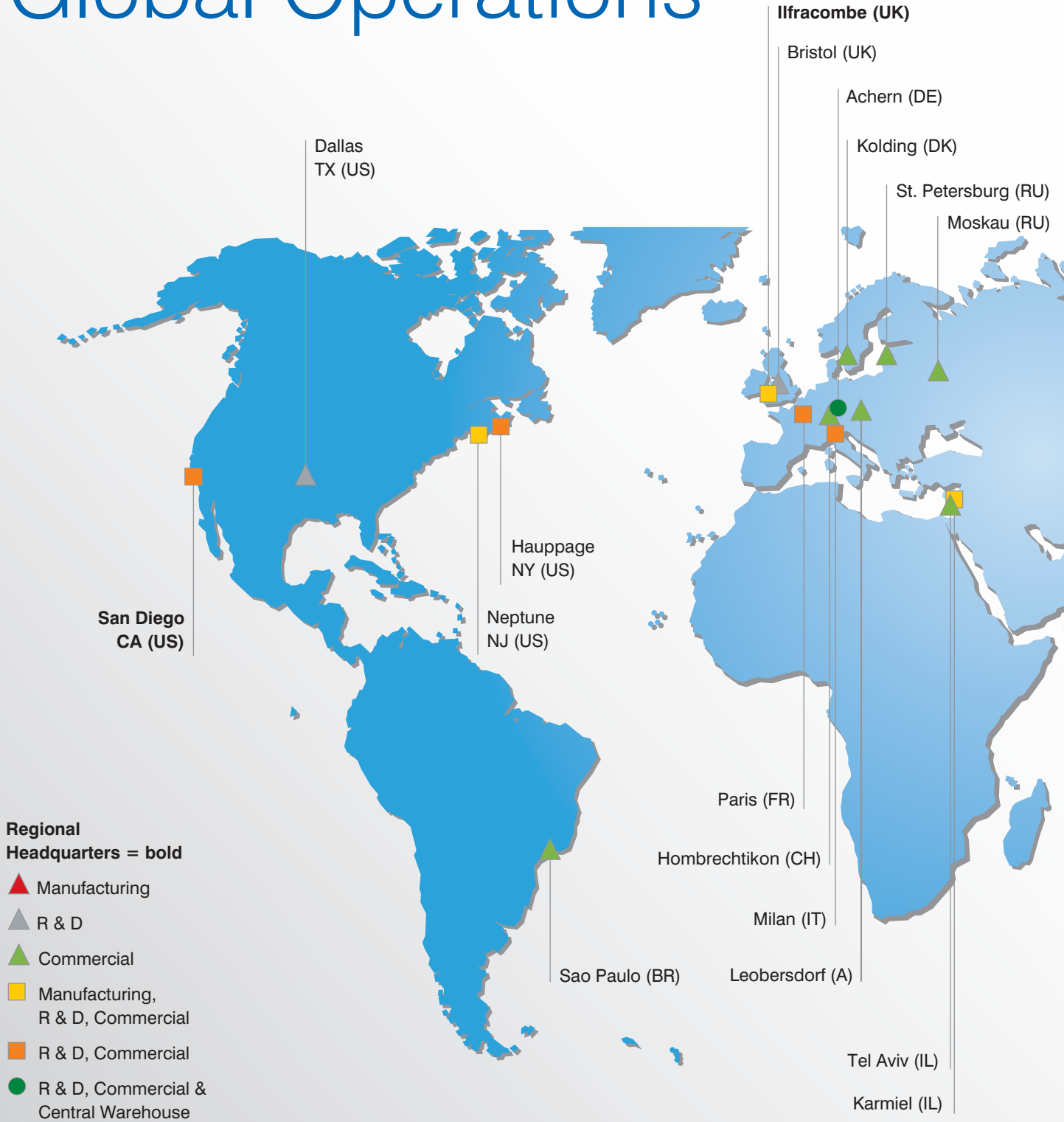
Medical products isolation table

Product Series	Operator-/ Patient-Protection			Isolation	
	Input to Ground	Output to Ground	Input to Output	Input to Ground	Output to Ground
AC-DC					
CM4	2 x MOPP	1 x MOPP	functional isolation	4kVac	1.5kVac
CUS30M/ 60M/ 100ME/ 150M/ 400M	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	1.5kVac
CUS200M/ 350M/ 350MP-1000	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	2kVac
CUS600M	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	2kVac
CUS1500M	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	2kVac
DTM36-C8	2 x MOPP	Class II	Class II	4kVac	Class II
DTM65-D	2 x MOPP	1 x MOPP	ground connection or optional 1 x MOPP	4kVac	1.5kVac
DTM65-C8	2 x MOPP	Class II	Class II	4kVac	Class II
DTM110-C	2 x MOPP	1 x MOPP	functional isolation	4kVac	1.5kVac
DTM110-C8	2 x MOPP	Class II	Class II	4kVac	Class II
DTM165-C	2 x MOPP	1 x MOPP	functional isolation	4kVac	1.5kVac
DTM250-D	2 x MOPP	1 x MOPP	1 x MOPP or optional ground connection	4kVac	1.5kVac
DTM300-D1	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	1.5kVac
DTM300-D2	2 x MOPP	Class II	Class II	4kVac	Class II
EFE300M, EFE400M	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	1.5kVac
GXE600	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	2kVac
KMS-A	2 x MOPP	Class II	Class II	4kVac	Class II
NV175M	2 x MOPP	1 x MOPP	functional isolation	4kVac	1.5kVac
NVM175	2 x MOPP	1 x MOPP	1 x MOPP	4.5kVac	1.5kVac
NV350/ 700 - C type modules only	2 x MOPP	1 x MOPP	functional isolation	4kVac	1.5kVac
NV350/ 700 - CM type modules only	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	1.5kVac
QM4, QM5, QM7, QM8, QM8B, QS4, QS5, QS5H, QS7	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	1.5kVac
RWS1000B/ME, RWS1500B/ME	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	2kVac
SWS1000L	2 x MOPP	1 x MOPP	functional isolation	4kVac	2kVac
Vega / Vega Lite	2 x MOPP	1 x MOPP	functional isolation	4kVac	2.3kVdc
WMM30	2 x MOPP	Class II	Class II	4kVac	Class II
XMS500 / XMS500A	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	1.5kVac
ZMS100	2 x MOPP	1 x MOPP	1 x MOPP	4kVac	1.5kVac
CUT35	2 x MOPP	1 x MOPP	1 x MOPP	3kVac	2kVac
HWS, HWS-A (with /ME option)	2 x MOPP	1 x MOPP	1 x MOPP	3kVac	2kVac
NV175	2 x MOPP	1 x MOPP	functional isolation	3kVac	1.5kVac
NV350/ 700 - all other models	2 x MOPP	1 x MOPP	functional isolation	3kVac	1.5kVac
DC-DC					
PX-M	2 x MOPP	N/A	N/A	5kVac	N/A

*Suitability should always be qualified in the end application ■ Ready to use ■ End equipment requirements

Input to Output	Earth Leakage current	Suitable for B and BF rated equipment*		Working altitude up to Medical	Protection Class
		B	BF		
500Vdc	<200 μ A	■	■	3000m	Class I
1.5kVac	<250 μ A	■	■	5000m	Class I & Class II
1.5kVac	<300 μ A	■	■	4000m	Class I
1.5kVac	<200 μ A	■	■	5000m	Class I & Class II
1.5kVac	<300 μ A	■	■	4000m	Class I
Class II	Class II	■	■	5000m	Class II
ground connection or 1.5kVac	<300 μ A	■	■	5000m	Class I
Class II	Class II	■	■	3000m	Class II
500Vdc	<300 μ A	■	■	3000m	Class I
Class II	Class II	■	■	5000m	Class II
500Vdc	<300 μ A	■	■	3000m	Class I
1.5kVac (optional ground connection)	<300 μ A	■	■	5000m	Class I
1.5kVac	<300 μ A	■	■	5000m	Class I or Class II
Class II	Class II	■	■	5000m	Class I or Class II
1.5kVac	<300 μ A	■	■	3000m	Class I
1.5kVac	<300 μ A	■	■	5000m	Class I
Class II	Class II	N/A	N/A	5000m	Class II
200Vdc	<300 μ A	■	■	3000m	Class I
1.5kVac	<200 μ A	■	■	3000m	Class I
200Vdc	<300 μ A	■	■	5000m	Class I
500Vac	<300 μ A	■	■	5000m	Class I
1.5kVac	<300 μ A	■	■	5000m	Class I
1.5kVac	<300 μ A	■	■	4000m	Class I
500Vac	<300 μ A	■	■	5000m	Class I
200Vdc	<300 μ A	■	■	5000m	Class I
Class II	Class II	■	■	5000m	Class II
1.5kVac	<150 μ A	■	■	3000m	Class I or Class II
1.5kVac	<250 μ A	■	■	5000m	Class I & Class II
500Vac	<300 μ A	■	■	4000m	Class I
500Vac	<500 μ A	■	■	3000m	Class I
200Vdc	<300 μ A	■	■	3000m	Class I
200Vdc	<300 μ A	■	■	5000m	Class I
N/A	N/A	■	■	5000m	N/A

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.

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 and medical 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.

The background of the page features a stylized world map composed of numerous small, light blue circles of varying sizes, creating a dotted effect. A large, semi-transparent globe is positioned in the lower right quadrant, also rendered with a similar dotted pattern of blue circles.

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.

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