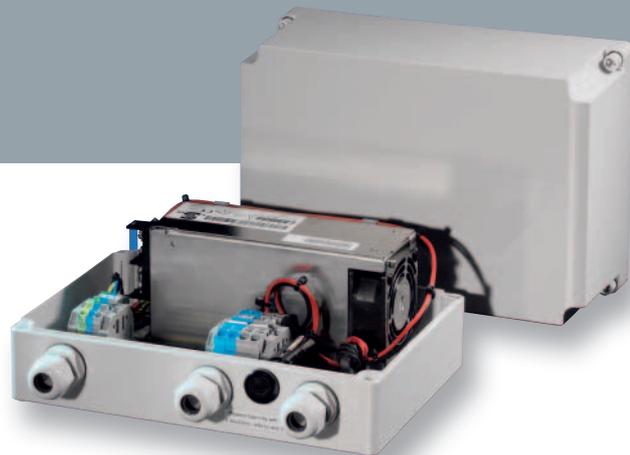


Power Supplies and DC-DC Converters



TDK-Lambda





Power Supply Solutions.

Worldwide

TDK-Lambda offers a broad range of standard power supplies for many applications. This brochure is designed to give a quick overview for the complete product range.

To ease navigation the product ranges are sorted into special categories on the next page. Individual product information is abbreviated to the relevant data required to make an initial selection of possible models for your application. For detailed technical data, please follow the web link alongside each product highlight.

Each product page contains the following symbols to indicate the main applications that each product is designed for. The symbols are intended to give a quick guideline only and for many applications several different TDK-Lambda products will be suitable. For assistance to find the best product for your application, please contact our technical sales department.



www.emea.tdk-lambda.com



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Configurable Power Supplies

Highlights and Key Features

CONFIGURABLE POWER SUPPLIES

Applications

- Most applications, but especially
- Equipment needing several different or uncommon output voltages
- Systems with different output voltage requirements in same package style

Features

- 100W to 1500W output power
- 1 to 16 separate output voltages
- Single phase, wide-range input
- Broad range of output voltages from 1.2V to 62Vdc
- Signal options on primary and secondary side
- Filter options with low leakage current for medical applications
- Cooling with integrated fans or external airflow (customer air)
- Safety approvals for international use
- Fast time to market
- Easy to configure with web-configurator on TDK Lambda website

NVM175 – Series

180W



1 Output + standby

Isolation: 4.5kVac input to output (2 x MOPPs for IEC60601-1)
1.5kVac output to ground, 1.5kVac input to ground

Leakage current: <170 μ A

Input fuse: Dual fuses (live and neutral)

Output power:	180W
Input voltage:	90 – 264Vac, 45 – 63Hz
Output voltage:	12 or 24Vdc
Efficiency:	Up to 90%, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/nv

CFE400M – Series

300W, 400W, 450W



1 Output + standby

Environment: ErP & Climate Savers Gold compliant

Isolation: 4kVac input to output (2 x MOPPs for IEC60601-1)
1.5kVac output to ground, 1.5kVac input to ground

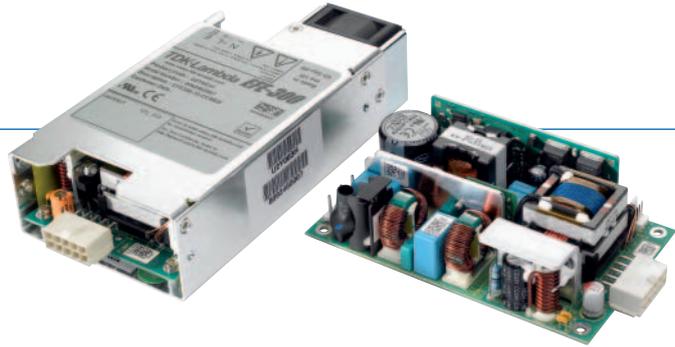
Cooling: Convection, low noise fan option or customer air

Output power:	300W convection, 400W fan cooled, 450W peak
Input voltage:	85 – 264Vac, 47 – 63Hz (440Hz with reduced PFC) 0.5W Standby power
Output voltage:	12, 24 or 48Vdc (see datasheet for adjustment range)
Efficiency:	94% typical for 48Vdc and 24Vdc (91% for 12Vdc). At 230Vac, 80% load
Warranty:	5 years

More information: www.uk.tdk-lambda.com/cfe

EFE300 – Series

300W, 400W



1 Output + standby

High power density: 300W on 5 x 3 inch footprint
Input fuse: Dual fuses (live and neutral)
Cooling: Customer air or low noise, variable speed, fan option

Output power:	300W continuous, 400W peak
Input voltage:	90 – 264Vac, 45 – 63Hz (440Hz with reduced PFC), 120 – 350Vdc
Output voltage:	12 or 24Vdc (non standard voltages available)
Efficiency:	90% typical
Warranty:	5 years

More information: www.uk.tdk-lambda.com/efe

EFE300M – Series

300W, 400W



1 Output + standby

High power density: 300W medical power on 6 x 3 inch footprint
Isolation: 4kVac input to output (2 x MOPPs for IEC60601-1)
 1.5kVac output to ground, 1.5kVac input to ground
Cooling: Customer air or low noise, variable speed, fan option

Output power:	300W continuous, 400W peak power
Input voltage:	90 – 264Vac, 45 – 63Hz (440Hz with reduced PFC), 120 – 350Vdc
Output voltage:	12, 24, 28, 48 or 50Vdc (non standard voltages available)
Efficiency:	90% typical (87% typical if Standby Supply is fully loaded)
Warranty:	5 years

More information: www.uk.tdk-lambda.com/efe-m

EFE400 – Series

400W, 530W



Industrial



Test



Broadcast



Comm



Renewable



1 Output + standby

High power density: 400W on 6 x 3 inch footprint
Input fuse: Dual fuses (live and neutral)
Cooling: Customer air or low noise, variable speed, fan option

Output power:	400W continuous, 530W peak power
Input voltage:	90 – 264Vac, 45 – 63Hz (440Hz with reduced PFC), 120 – 350Vdc
Output voltage:	12 or 24Vdc (non standard voltages available)
Efficiency:	90%, typical
Warranty:	5 years

More information: www.uk.tdk-lambda.com/efe

EFE400M – Series

400W, 530W



Medical



Industrial



Test



Broadcast



Comm



Renewable



1 Output + standby

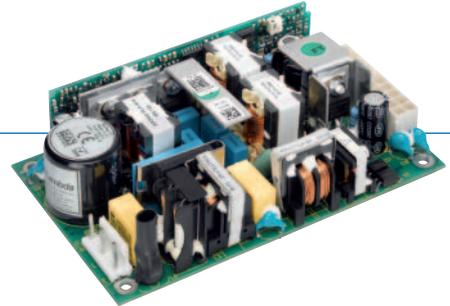
High power density: 400W in 6.5 x 3.5 inch footprint
Isolation: 4kVac input to output (2 x MOPPs for IEC60601-1)
1.5kVac output to ground, 1.5kVac input to ground
Cooling: Customer air or low noise, variable speed, fan option

Output power:	400W continuous, 530W peak power
Input voltage:	90 – 264Vac, 45 – 63Hz (440Hz with reduced PFC), 120 – 350Vdc
Output voltage:	12, 24 or 48Vdc (non standard voltages available)
Efficiency:	90% typical (87% typical if Standby Supply is fully loaded)
Warranty:	5 years

More information: www.uk.tdk-lambda.com/efe-m

NV175M – Series

180W, 200W



1 to 3 Outputs

Isolation: 4kVac input to output (2 x MOPPs for IEC60601-1)
200Vdc output to ground, 1.5kVac input to ground

Cooling: Customer air or low noise, variable speed, fan option

Output power:	180W fan cooled, 200W peak power
Input voltage:	90 – 264Vac, 45 – 63Hz
Output voltage:	Output 1: 12, 15 or 24Vdc; Output 2: 12, 15 or 24Vdc; Output 3: 3.3, 5, 12, 15Vdc
Efficiency:	Up to 90%, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/nv

NV100 – Series

100W



1 to 4 Outputs

Efficiency: Up to 90%

Working altitude: –200 to 3000m

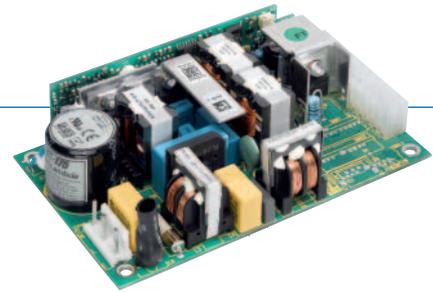
Cooling: Customer air or convection

Output power:	100W fan cooled, 50W convection cooled
Input voltage:	90 – 264Vac, 45 - 63Hz, (440Hz with reduced PFC), 120 – 350Vdc
Output voltage:	Output 1: 5 or 24Vdc, Output 2: 3.3 or 5Vdc Output 3: 12, 15 or 24.5Vdc, Output 4: 12 or 15Vdc
Efficiency:	Up to 90%, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/nv

NV175 – Series

180W, 200W



1 to 4 Outputs + standby option

Isolation: 3kVac input to output (2 x MOOPs for IEC60601-1)
200Vdc output to ground, 1.5kVac input to ground

Controls & signals: Industry standard or ATX compatible

Cooling: Customer air or low noise, variable speed, fan option

Output power:	180W continuous, 200W peak power
Input voltage:	90 – 264Vac, 45 – 63Hz, (440Hz with reduced PFC), 120 – 350Vdc
Output voltage:	Output 1: 5, 12, 15 or 24Vdc; Output 2: 1.8, 2.7, 3.3 or 5Vdc; Output 3: 12, 15, 24Vdc; Output 4: 3.3, 5, 12 or 15Vdc
Efficiency:	Up to 90%, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/nv

NV300 – Series

300W



1 to 4 Outputs + standby option

Isolation: 3kVac input to output (2 x MOOPs for IEC60601-1)
200Vdc output to ground, 1.5kVac input to ground

Controls & signals: ATX compatible

Cooling: Customer air or low noise, variable speed, fan option

Output power:	300W
Input voltage:	90 – 264Vac, 45 – 63Hz, (440Hz with reduced PFC), 120 – 350Vdc
Output voltage:	Output 1: 5, 12 or 24Vdc; Output 2: 1.8, 2.7, 3.3, 5, 12 or 15Vdc; Output 3: 12, 15 or 24Vdc; Output 4: 3.3, 5, 12 or 15Vdc
Efficiency:	Up to 90%, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/nv

NV350 – Series

350W, 660W, 740W



Medical



Industrial



Test



Broadcast



Comm



Renewable



1 to 6 Outputs + standby option

High flexibility:	10 single and 14 dual output modules available
Isolation:	3kVac input to output (2 x MOOPs for IEC60601-1) 4kVac input to output (2 x MOPPs) products available
Cooling:	Low noise, variable speed, fan option or customer air

Output power:	350W at wide range input, 660W at high line, 740W peak power, fan cooled
Input voltage:	90 – 264Vac, 45 – 63Hz, (440Hz with reduced PFC)
Output voltage:	3.2 to 63Vdc / up to 40A
Efficiency:	Up to 90%, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/nv350-700

NV700 – Series

700W, 1150W, 1450W



Medical



Industrial



Test



Broadcast



Comm



Renewable



1 to 8 Outputs + standby option

High flexibility:	10 single and 14 dual output modules available
Isolation:	3kVac input to output (2 x MOOPs for IEC60601-1) 4kVac input to output (2 x MOPPs) products available
Cooling:	Low noise, variable speed, fan option or customer air

Output power:	700W at wide range input, 1150W at high line, 1450W peak power, fan cooled
Input voltage:	90 – 264Vac, 45 - 63Hz, (440Hz with reduced PFC)
Output voltage:	3.2 to 63Vdc / up to 40A
Efficiency:	Up to 90%, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/nv350-700

Vega Lite – Series

550W, 750W, 900W



Medical



Industrial



Test



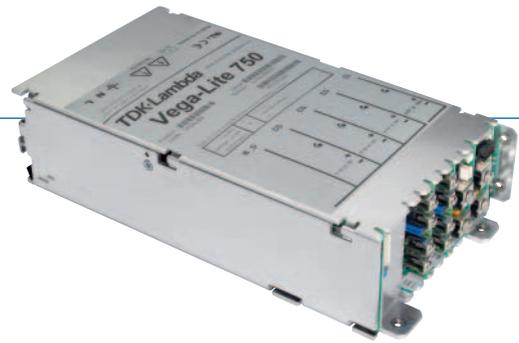
Broadcast



Comm



Renewable



1 to 11 Outputs + standby option

High flexibility:	21 single and 7 dual output modules available
Isolation:	4kVac input to output (2 x MOPPs for IEC60601-1) 200Vdc output to ground, 1.5kVac input to ground
Operational Altitude:	Up to 5000m, application dependent

Output power:	550 or 750W with wide range input (converter dependent), 900W at high line
Input voltage:	85 – 264Vac, 47 – 63Hz, (440Hz with reduced PFC)
Output voltage:	1.8 to 56Vdc up to 60A, wide range adjustable
Efficiency:	Up to 75%, typical at 230Vac & 100% rated power, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/vega-lite

Vega – Series

450W, 650W, 900W



Medical



Industrial



Test



Broadcast



Comm



Renewable



1 to 11 Outputs + standby option

Highest flexibility:	45 single and 25 dual output modules available
Isolation:	4kVac input to output (2 x MOPPs for IEC60601-1) 200Vdc output to ground, 1.5kVac input to ground
Operational Altitude:	Up to 5000m, application dependent

Output power:	450 or 650W with wide range input (converter dependent), 900W at high line
Input voltage:	90 – 264Vac, 47 – 63Hz, (440Hz with reduced PFC)
Output voltage:	1.8 to 62Vdc up to 40A, programmable modules also available
Efficiency:	Up to 75%, typical at 230Vac & 100% rated power, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/vega

Vega – DC-Series

450W



1 to 11 Outputs + standby option

- Highest flexibility:** 45 single and 25 dual output modules available
- Operational Altitude:** Up to 5000m, application dependent
- Combining modules:** Parallel (for increased current or N+1 redundancy)
- Cooling:** End fan (various options) or customer air

Output power:	450W
Input voltage:	34 – 75Vdc (derating below 44Vdc to 340W)
Output voltage:	1.8 to 62Vdc up to 40A, programmable modules also available
Efficiency:	Up to 75%, typical at 48Vdc & 100% rated power, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/vega

Alpha – Series

1000W, 1500W



1 to 14 and 1 to 16 Outputs + standby option

- High flexibility:** 21 single and 5 dual output modules available
- Number of outputs:** 1 to 14 with Alpha1000, 1 to 16 with Alpha1500
- Combining modules:** Parallel (for increased current or N+1 redundancy) and/or series (for increased voltage) connection possible

Output power:	1000W with wide range input, 1500W at high line
Input voltage:	85 – 264Vac, 47 – 63Hz
Output voltage:	1.8 to 48Vdc up to 60A, wide range adjustable
Efficiency:	Up to 75%, typical at 230Vac & 100% rated power, configuration dependent
Warranty:	3 years

More information: www.uk.tdk-lambda.com/alpha

Desktop Power Supplies

Highlights and Key Features



Applications

- External power supplies as accessory for end equipment
- Typically used for portable equipment

Features

- Fully enclosed plastic case
- Plug and play – no input range setting or output voltage adjustment required
- IEC mains input connection
- DC output cable and connector
- ErP, CEC and EISA compliant models
- DTM series suitable for medical equipment

DTM65 – Series

60 – 65W



Medical



Industrial



Test



Broadcast



Comm



Case:	Enclosed plastic case
Power losses:	Conforms to ErP, CEC and EISA regulations
Safety:	EN/UL 60601-1 for medical equipment CE marked for Low Voltage Directive

Output power:	60 – 65W, convection cooled
Input voltage:	90 – 264Vac, 47 - 63Hz
Output voltage:	12, 15, 18, 24, 36 or 48Vdc
Efficiency:	87% average efficiency
Warranty:	2 years

More information: www.uk.tdk-lambda.com/dtm

DTM110 – Series

90 – 110W



Medical



Industrial



Test



Broadcast



Comm



Case:	Enclosed plastic case
Power losses:	Conforms to ErP, CEC and EISA regulations
Safety:	EN60601-1 for medical equipment CE marked for Low Voltage Directive

Output power:	90 – 110W, convection cooled
Input voltage:	90 – 264Vac, 47 – 63Hz
Output voltage:	12, 13.5, 15, 19, 20 or 24Vdc
Efficiency:	87% average efficiency
Warranty:	2 years

More information: www.uk.tdk-lambda.com/dtm

DT150 – Series

140 – 150W



Industrial



Test



Broadcast



Comm



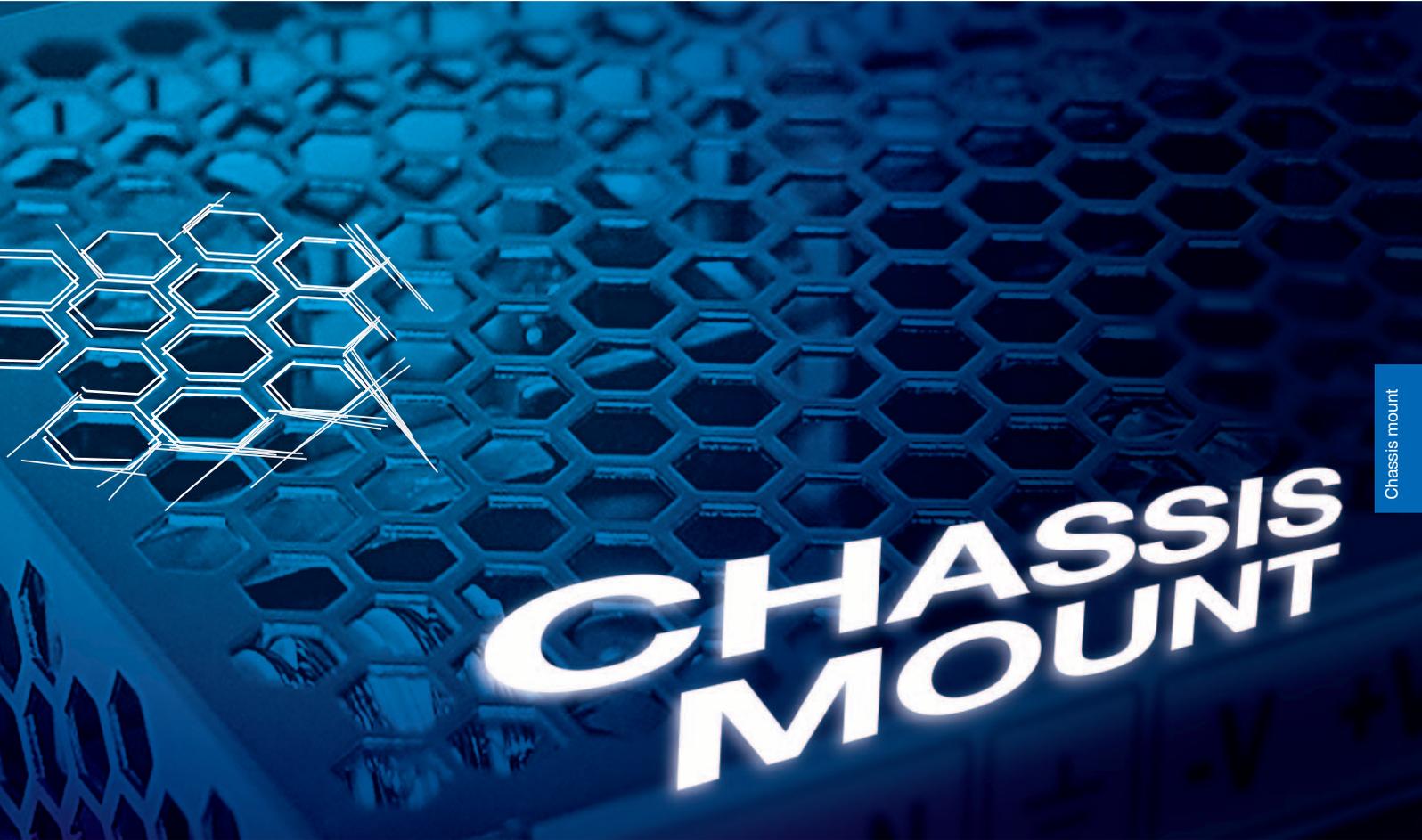
Case:	Enclosed plastic case
Power losses:	Conforms to ErP, CEC and EISA regulations
Safety:	EN/CSA60950-1 for ITE / industrial equipment CE marked for Low Voltage Directive

Output power:	140 – 150W, convection cooled
Input voltage:	90– 264Vac, 47 – 63Hz
Output voltage:	12, 16, 19, 24, 36 or 48Vdc
Efficiency:	87% average efficiency
Warranty:	2 years

More information: www.uk.tdk-lambda.com/dt-c

Chassis mount Power Supplies

Highlights and Key Features



Applications

- Embedded (built in) power supplies for a broad range of applications
- Suitable for industrial applications, automation, test-equipment
- High reliability and low cost products available

Features

- 5 to 1500W output power
- Single phase wide range input 85 – 265Vac
- Power factor correction meets EN61000-3-2 class A harmonics
- Input/output connection with screw terminals or PCB connectors
- Enclosed or open frame case style
- Safety meets EN/IEC/UL 60950-1 standard. CE marked for Low Voltage Directive

HWS15 to HWS150(A) – Series

15 – 150W



New “A”-models: Increased efficiency
Full compatible

Operating temperature: Up to 70°C

Warranty: Lifetime warranty



Output power:	15, 30, 50, 100, 150W, convection cooled
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	3.3, 5, 12, 15, 24 or 48Vdc
Efficiency:	Up to 90%
Warranty:	Lifetime

More information: www.uk.tdk-lambda.com/hws

HWS300 to HWS600 – Series

300 – 600W



Warranty: Lifetime warranty
Highest reliability

Size: Unique height of 82mm

Input: Wide range 85 – 265Vac without derating



Output power:	300, 600W, internal fan cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 330Vdc
Output voltage:	3.3, 5, 12, 15, 24 or 48Vdc
Efficiency:	Up to 86%
Warranty:	Lifetime

More information: www.uk.tdk-lambda.com/hws

HWS1000 to HWS1500 – Series

1000 – 1500W



Industrial



Test



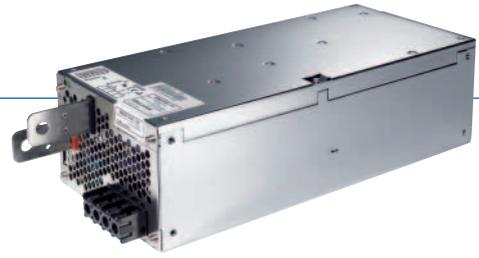
Broadcast



Comm



LED



Warranty:

**Lifetime warranty
Highest reliability**

Size:

Unique height of 82mm

Output:

Remote voltage programming

Output power:	1000, 1500W, internal fan cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 330Vdc
Output voltage:	3.3, 5, 6, 7, 12, 15, 24, 36, 48 or 60Vdc
Efficiency:	Up to 90%
Warranty:	Lifetime

More information: www.uk.tdk-lambda.com/hws

HWS300P / HWS600P – Series

300 / 600W



Industrial



Test



Warranty:

**Lifetime warranty
Highest reliability**

Peak power capability:

**Up to 1008 Watt for 5 sec. for HWS-300P
Up to 1998 Watt for 5 sec. for HWS-600P**

Output power:	300, 600W, internal fan cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 330Vdc
Output voltage:	24, 36 or 48Vdc
Efficiency:	Up to 87%
Warranty:	Lifetime

More information: www.uk.tdk-lambda.com/hws-p

HWS-ME – Series

30 – 1500W



Medical



Warranty:	Lifetime warranty Highest reliability
Medical use:	Reduced leakage current for medical applications
Safety:	EN/IEC/UL 60601-1 for basic insulation

Output power:	300, 600, 1000, 1500W, internal fan cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	3.3, 5, 12, 15, 24 or 48Vdc
Efficiency:	Up to 88%
Warranty:	Lifetime

More information: www.uk.tdk-lambda.com/hws-me

HWS-HD – Series

30 – 1500W



Industrial



Test



Broadcast



Comm



LED



COTS



Warranty:	Lifetime warranty Highest reliability
Operation:	Coating for harsh environmental conditions
Safety:	EN/IEC/UL 60950-1

Output power:	300, 600, 1000, 1500W, internal fan cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	3.3, 5, 12, 15, 24 or 48Vdc
Efficiency:	Up to 88%
Warranty:	Lifetime

More information: www.uk.tdk-lambda.com/hws-hd

HWS600L/BAT – Series

600W



Industrial



Test



LED



Comm



Suitable for battery-charging

Current limit: Constant current mode
Adjustable with internal potentiometer

Output voltage control: Analog input to program 20 – 120%
of nominal output with 1 – 6Vdc

Output power:	600W, internal fan cooling
Input voltage:	85 – 265Vac, 47 – 63Hz or 120 – 350Vdc
Output voltage:	36 or 60Vdc
Efficiency:	Up to 86%
Warranty:	3 years

HWS1000L/BAT – Series

1000W



Industrial



Test



LED



Comm



Medical



Suitable for battery-charging

Current limit: Constant current mode
Adjustable with internal potentiometer

Output voltage control: Analog input to program 20 – 120%
of nominal output with 1 – 6Vdc

Output power:	1000W, internal fan cooling
Input voltage:	85 – 265Vac, 47 – 63Hz or 120 – 350Vdc
Output voltage:	36 or 60Vdc
Efficiency:	Up to 86%
Warranty:	3 years

LZSa – Series

500 – 1500W



Line dips: SEMI F47 compliant above 100VAC input
Operation temperature: -40°C to +71°C
Vibration / shock: MIL-STD-810E
Output: Wide output voltage adjustment range

Output power:	500, 1000, 1500W, internal fan cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 100 – 400Vdc
Output voltage:	12, 24 or 48Vdc
Efficiency:	Up to 84%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/lzsa

CPFE – Series

500 – 1000W



Cooling: Fanless operation
Conduction cooling via baseplate
Parallel operation with active current share
Control: I²C Interface on CPFE1000F

Output power:	500, 1000W
Input voltage:	90 – 265Vac, 47 – 63Hz
Output voltage:	12, 28 or 48Vdc
Efficiency:	Up to 86%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/cpfe

SWS300A – Series

300W



Industrial



Test



Comm



LED



PFC: Active Power Factor correction
Safety: Global approvals
Input: Transient protected IEC61000-4
Low cost

Output power:	300W, internal fan cooling
Input voltage:	85 – 265Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	3.3, 4, 5, 7.5, 12, 15, 24, 28, 36 or 48Vdc
Efficiency:	Up to 87%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/sws

SWS600 – Series

600W



Industrial



Test



Comm



LED



PFC: Active Power Factor correction
Safety: Global approvals
Input: Transient protected IEC61000-4
Low cost

Output power:	600W, internal fan cooling
Input voltage:	85 – 265Vac, 47– 63Hz or 120 – 370Vdc
Output voltage:	3.3, 5, 12, 15, 24, 36 or 48Vdc
Efficiency:	Up to 85%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/sws

SWS600L – Series

600W



Industrial



Test



LED



Comm



Dimensions: Low profile
Temperature: Wide operating temperature range up to 74°C
Cooling: Temperature controlled fan
Low cost

Output power:	600W, internal fan cooling
Input voltage:	85 – 265Vac, 47 – 63Hz or 120 – 350Vdc
Output voltage:	3.3, 5, 12, 15, 24, 36, 48 or 60Vdc
Efficiency:	Up to 86%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/sws

SWS1000L – Series

1000W



Industrial



Test



LED



Comm



Medical



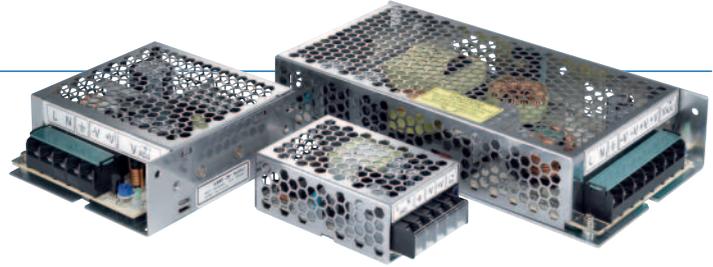
Dimensions: Low profile
Temperature: Wide operating temperature range up to 74°C
Safety: Medical approval EN/IEC/UL 60601-1
Low cost

Output power:	1000W, internal fan cooling
Input voltage:	85 – 265Vac, 47 – 63Hz or 120 – 350Vdc
Output voltage:	3.3, 5, 12, 15, 24, 36, 48 or 60Vdc
Efficiency:	Up to 86%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/sws

LS25 to LS150 – Series

25 – 150W



Warranty: 3 years
Input: Withstands 300Vac surges (5s)
Temperature: Wide operating temperature range up to 70°C
Low cost

Output power:	25, 35, 50, 75, 100, 150W, convection cooling
Input voltage:	88 – 264Vac, 47 – 63Hz or 125 – 373Vdc
Output voltage:	3.3, 5, 12, 15, 24, 36 or 48Vdc
Efficiency:	Up to 87%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/lis

LS200 – Series

200W



Warranty: 3 years
Peak-Power: 250W peak rating on 24 & 36V models
Cooling: Convection or fan cooled
size: Only 41mm high for 1U integration

Output power:	200W, internal fan cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 373Vdc
Output voltage:	3.3, 5, 7.5, 12, 15, 24, 36 or 48Vdc
Efficiency:	Up to 85%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/lis

GWS250 – Series

250W



Industrial



Test



Broadcast



Comm



LED



Warranty: 5 years
Eco-design: Standby Power Draw < 0.5 Watt
Built to meet ErP directive
Harmonics: Conforms to class C for lighting equipment

Output power:	250W, convection cooling
Input voltage:	85 – 264Vac (300Vac for 5 sec.), 47 – 63Hz or 120 – 373Vdc
Output voltage:	12, 24, 36 or 48Vdc
Efficiency:	Up to 93%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/gws

GWS500 – Series

500W



Industrial



Test



Broadcast



Comm



LED



Warranty: 5 years
Eco-design: Standby Power Draw < 0.5 Watt
Built to meet ErP directive
Harmonics: Conforms to class C for lighting equipment

Output power:	500W, internal fan cooling
Input voltage:	85 – 264Vac (300Vac for 5 sec.), 47 – 63Hz or 120 – 373Vdc
Output voltage:	5, 7.5, 12, 24, 36 or 48Vdc
Efficiency:	Up to 90%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/gws

GWS/BAT – Series

250 – 500W



Industrial



Test



Broadcast



Comm



LED



Suitable for battery-charging

Current limit: Constant current mode
Output voltage control: Analog input to program 60(80) – 120% of nominal output with 3(4) – 6Vdc

Output power:	250W, 500W
Input voltage:	85 – 264Vac (300Vac for 5 sec.), 47 – 63Hz or 120 – 373Vdc
Output voltage:	24 (28.8) or 48 (57.6)Vdc
Efficiency:	Up to 93%
Warranty:	5 years

CUS250LD – Series

250W



Test



Broadcast



Comm



LED



Low profile: Only 30mm high
Operation temperature: –25°C to +70°C
Cooling: Natural convection
Output: Typical voltages for LED supply

Output power:	Up to 250W, convection cooling
Input voltage:	85 – 265Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	3.3, 4.2, 5, 12 or 24Vdc
Efficiency:	Up to 90%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/cus

RFE1600 – Series

1600W



Industrial



Test



Comm



Size:	Flat shape for 1U integration
Redundancy:	n+1 operation with integrated ORing FET
Paralleling:	With active current share
Signaling:	Full array of signals

Output power:	1600W, internal fan cooling
Input voltage:	85 – 265Vac, 47 – 63Hz
Output voltage:	12, 24 or 48Vdc
Efficiency:	Up to 92%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/rfe

RFE1000 – Series

1000W



Industrial



Test



Comm



Case:	Flat shape for 1U integration
Redundancy:	n+1 operation with integrated ORing diode
Paralleling:	With active current share
Signaling:	Full array of signals

Output power:	1000W, internal fan for cooling
Input voltage:	85 – 264Vac, 47 – 63Hz
Output voltage:	24, 32 or 48Vdc
Efficiency:	Up to 89%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/rfe

ZWS-B – Series

10 – 30W



Industrial



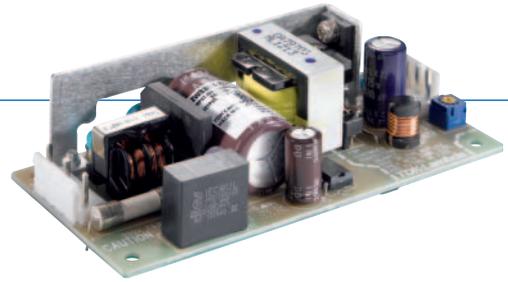
Test



Broadcast



Comm



Warranty: High reliability
10 year E-cap lifetime

Operating temperature: -10°C to +70°C

Eco-design: No load input power <0,5W

Output power:	10, 15, 30W, convection cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	3.3, 5, 12, 15, or 24Vdc
Efficiency:	Up to 88%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/zws-b

ZWS-BAF – Series

50 – 300W



Industrial



Test



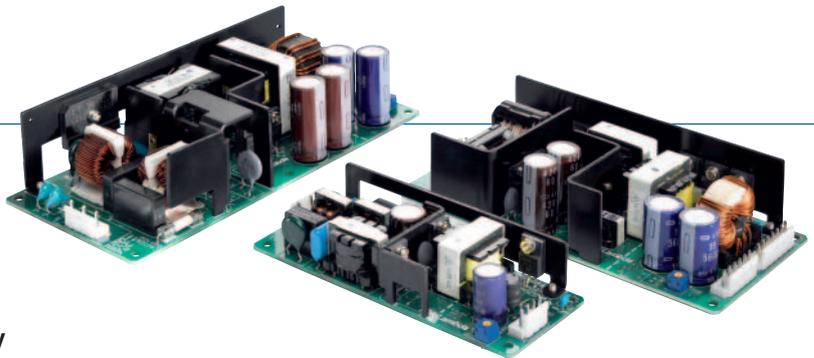
Broadcast



Comm



LED



Warranty: High reliability
10 year E-cap lifetime

Input: 85 – 264Vac, 47 – 63Hz or 120 – 370Vdc

Cooling: Natural convection

Output power:	50, 75, 100, 150, 300W, convection cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	3.3, 5, 12, 15, 24 or 48Vdc
Efficiency:	Up to 91%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/zws-baf

ZWS-BP – Series

150 – 240W



Industrial



Test



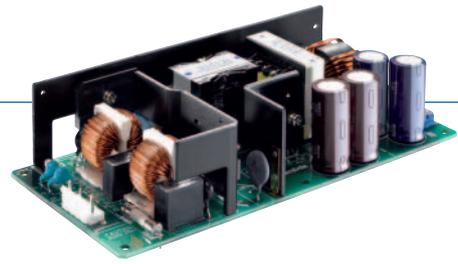
Broadcast



Comm



LED



Warranty: High reliability
10 year E-cap lifetime

Peak power capability: 200% for up to 5 sec. (duty: 0.35)

Operating temperature: -10°C to +70°C

Output power:	150, 240W, convection cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	24, 36 or 48Vdc
Efficiency:	Up to 91%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/zws-bp

ZWD-PAF – Series

100 – 225W



Industrial



Test



Peak power capability: 200% for up to 5 sec. (duty: 0.35)
On main output

Output 2: Additional 24V

Operating temperature: -10°C to +70°C

Output power:	100, 150, 225W, convection cooling
Input voltage:	85 – 265Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	5Vdc main, 24Vdc second
Efficiency:	Up to 83%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/zwd-paf

MTW – Series

15 – 60W



Industrial



Test



Broadcast



Comm



Output: Output 1 isolated from output 2,3
Minimum load: No minimum load required
Size: Only 26mm height
Operating temperature: -10°C to +60°C

Output power:	15, 30, 60W, convection cooling
Input voltage:	85 – 265Vac, 47 – 440Hz
Output voltage:	5V ± 12Vdc or 5V ± 15Vdc
Efficiency:	Up to 76%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/mtw

ZWQ – Series

80 – 130W



Industrial



Test



Broadcast



Comm



Quad output: Output one and four adjustable
Floating fourth output
Size: Low profile for 1U integration
Cooling: Natural convection

Output power:	80, 130W, convection cooling
Input voltage:	85 – 265Vac, 47– 63Hz or 120 – 370Vdc
Output voltage:	5Vdc main, ± 12/15Vdc and 3.3, 5, 12 or 24Vdc
Efficiency:	Up to 72%
Warranty:	1 year

More information: www.uk.tdk-lambda.com/zwq

ZPSA – Series

20 – 100W



Industrial



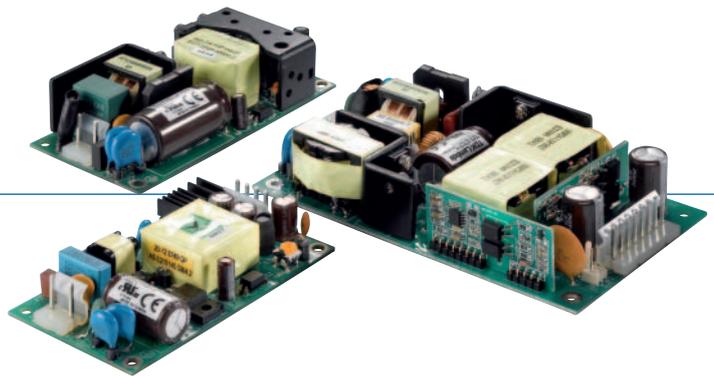
Test



Broadcast



Comm



Size: Low profile, industry standard footprint
2" x 4" and 3" x 5"

Safety: Global approvals

Immunity: Meets EN61000-4

Output power:	20, 40, 60, 100W, convection cooling
Input voltage:	90 – 264Vac, 47 – 440Hz or 120 – 370Vdc
Output voltage:	3.3, 5, 9, 12, 15, 18, 24, 28, 30, 36 or 48Vdc
Efficiency:	Up to 90%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/zpsa

ZPD – Series

40W



Industrial



Test



Broadcast



Comm



Size: Low profile, industry standard footprint
2" x 4"

Safety: Global approvals

Immunity: Meets EN61000-4

Output power:	40W, convection cooling
Input voltage:	85 – 264Vac, 47 – 440Hz or 120 – 370Vdc
Output voltage:	5Vdc main and 12 or 24Vdc
Efficiency:	Up to 78%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/zpd

ZPT – Series

40W



Industrial



Test



Broadcast



Comm



Size: Low profile, industry standard footprint
2" x 4"

Safety: Global approvals

Immunity: Meets EN61000-4

Output power:	40W, convection cooling
Input voltage:	85 – 264Vac, 47 – 440Hz or 120 – 370Vdc
Output voltage:	5 or 3.3Vdc main and 5, 12, 15, 24Vdc
Efficiency:	Up to 75%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/zpt

MWS – Series

65W



Medical



Industrial



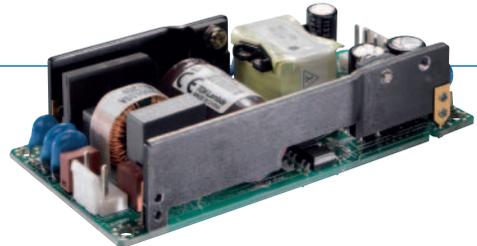
Test



Broadcast



Comm



Size: Low profile, industry standard footprint
2" x 4"

Safety: Global medical approval
No load power consumption <0.3W

Output power:	65W, convection cooling
Input voltage:	85 – 265Vac, 47 – 440Hz or 120 – 370Vdc
Output voltage:	5, 12, 15, 24 or 48Vdc
Efficiency:	Up to 89%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/mws65

CSS – Series

65 – 150W



Medical



Industrial



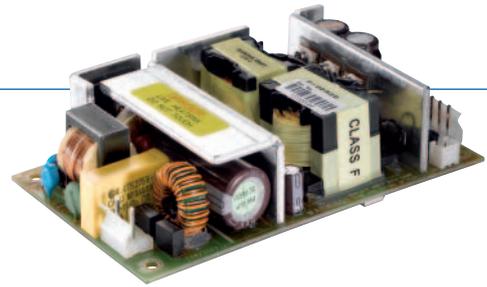
Test



Broadcast



Comm



Size: Low profile, industry standard footprint
2" x 4" and 3" x 5"

Safety: Global medical approvals

Protection: Dual input fuses

Output power:	65, 150W, convection cooling
Input voltage:	85 – 265Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	65W: 12, 15, 24, 36 or 48Vdc 150W: 5, 12, 15, 19, 24, 36 or 48Vdc
Efficiency:	Up to 87%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/css

PCB mount Power Supplies

Highlights and Key Features

PCB MOUNT POWER SUPPLIES

PCB mount

Applications

Power modules

- Distributed power architectures
- Customised designs with specific dimensions

PCB modules

- Low power applications

Features

- 5 to 1500W output power
- Single phase wide range input 85 – 265Vac
- For PCB mounting
- Flexibility for different cooling concepts

KPSA – Series

5 – 15W



Industrial



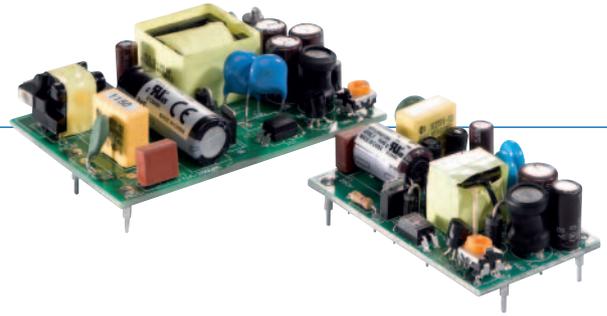
Test



Broadcast



Comm



Size: Small size & lightweight
No external components needed

Input: Universal input voltage
Low cost

Output power:	5, 10, 15W, convection cooling
Input voltage:	85 – 264Vac, 47 – 63Hz or 100 – 370Vdc
Output voltage:	3.3, 5, 12, 15, or 24Vdc
Efficiency:	Up to 82%
Warranty:	1 year

More information: www.uk.tdk-lambda.com/kpsa

KMS / KMD / KMT – Series

15 – 40W



Medical



Industrial



Test



Broadcast



Comm



Connection: Class II power supply (no PE required)
Single-, dual-, triple-output

Safety: Medical safety approvals

Case: Enclosed case with encapsulation

Output power:	15, 40W, convection cooling
Input voltage:	90 – 264Vac, 47 – 440Hz or 100 – 375Vdc
Output voltage:	3.3, 5, 9, 12, 15, 24, ± 12 or ± 15 Vdc
Efficiency:	Up to 83%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/km

PFE-S – Series

300 – 700W



Industrial



Test



Broadcast



Comm



COTS



LED



Format: Full Brick module with baseplate
Basic element for customised
power supply designs
100°C baseplate temperature

Output power:	300, 500, 700W, conduction cooling
Input voltage:	90 – 264Vac, 47 – 63Hz
Output voltage:	12, 28 or 48Vdc
Efficiency:	Up to 89%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/pfe

PFE-F – Series

500 – 1000W



Industrial



Test



Broadcast



Comm



COTS



LED



Format: Power module with baseplate
Basic element for customised
power supply designs
100°C baseplate temperature

Output power:	500, 1000W, conduction cooling
Input voltage:	90 – 264Vac, 47 – 63Hz
Output voltage:	12, 28 or 48Vdc
Efficiency:	Up to 86%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/pfe

PF-A – Series

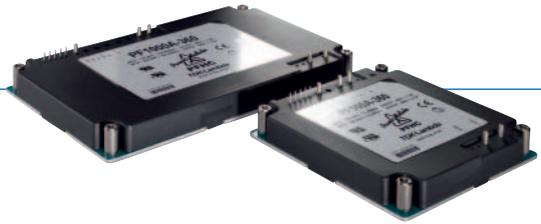
500 – 1500W



Industrial



Test



Format: Power module with baseplate
Basic element for customised power supply designs together with PAF/PH DC-DC converters

Paralleling: Parallel operation with active current share

Output power:	500(750), 1000(1500)W, conduction cooling
Input voltage:	85 – 265Vac 47 – 63Hz
Output voltage:	~360Vdc bulk power bus
Efficiency:	Up to 95%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/pf-a

DIN-Rail Power Supplies

Highlights and Key Features

DIN-RAIL POWER SUPPLIES



DIN-Rail

Applications

- Factory Automation and controls
- Facility & Hotel or Home Automation
- Food & Beverage Industry
- Robot Controls
- Paper Handling, Sorting, Dispatch Systems
- Process Automation
- Conveyors, Elevators, Rolling Stairs
- Typical for DIN-Rail mounting in cabinets

Features

- Efficiency up to 94% – NEW DRF-Series
- Mainly with 24V output, but also other output voltages from 5V to 48V are available
- Power range from 10W to 1000W with convection-cooling
- Single-phase and three-phase input (for models from 120W output power onwards)
- Plastic cases for low-power units up to 100W, metal-cases for higher output power
- Flat shape for wall-mount cabinets
- Slim shape for industrial cabinets
- UL 508 Listed
- Additional DC/DC-Converters up to 60W for DIN-Rail are also available

DRB – Series

15 – 100W



Industrial



Output voltages: 5 to 48Vdc
Operating temperature: -20°C to +70°C
Dimensions: Very compact, slim shape
ErP Compliant

Output power:	15, 30, 50, 100W, convection cooled
Input voltage:	85 – 264Vac, 47 – 63Hz
Output voltage:	5, 12, 24 or 48Vdc
Efficiency:	Up to 89%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/drb

DRF Single Phase – Series

120 – 480W



Industrial



Case: Enclosed metal case
Operating temperature: -25°C to +70°C
Parallel operation: Possible
Peak Power: 150% nominal for 4 sec.

Output power:	120, 240, 480W, convection cooled
Input voltage:	90 – 264Vac, 47 – 63Hz
Output voltage:	24Vdc
Efficiency:	Up to 94%
Warranty:	5 years

DSP – Series

10 – 100W



Industrial

Shape: Flat profile for wall mount cabinets
Operating temperature: -25°C to +71°C
Safety: UL 508 Listed
Class II double insulation



Output power:	10, 30, 60, 100W, convection cooled
Input voltage:	85 – 264Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	5, 12, 15 or 24Vdc
Efficiency:	Up to 89%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/dsp

DPP – Series

15 – 100W



Industrial

Output voltages: 5 to 48Vdc
Operating temperature: -10°C to +71°C
Safety: UL 508 Listed
NEC Class 2 Compliant



Output power:	15, 25, 30, 50, 100W, convection cooled
Input voltage:	85 – 264Vac, 47 – 63Hz or 90 – 375Vdc
Output voltage:	5, 12, 15, 24 or 48Vdc
Efficiency:	Up to 87%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/dpp

DPP Single Phase – Series

120 – 480W



Industrial



Case:	Enclosed metal case
Operating temperature:	-40°C to +71°C
Parallel operation:	With current share function
Safety:	UL 508 Listed

Output power:	120, 240, 480W, convection cooled
Input voltage:	90 – 264Vac, 47 – 63Hz or 120 – 370Vdc
Output voltage:	12, 24 or 48Vdc
Efficiency:	Up to 88%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/dpp

DPP Three Phase – Series

120 – 960W



Industrial



Case:	Enclosed metal case
Operating temperature:	-40°C to +71°C
Parallel operation:	With current sharing
Safety:	UL 508 Listed

Output power:	120, 240, 480, 960W, convection cooled
Input voltage:	340 – 575Vac, 3-phase or 480 – 820Vdc
Output voltage:	12, 24 or 48Vdc
Efficiency:	Up to 93%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/dpp

DPX – Series

10 – 60W



Industrial



Output: Single and dual & triple output modules
Adjustable with front panel trimmer

Input: 4:1 input with nominal 24V or 48V
Protected against reverse voltage

Output power:	10, 15, 20, 30, 40, 60W, convection cooled
Input voltage:	9.5 – 36Vdc or 18 – 75Vdc
Output voltage:	3.3, 5, 12, 15, ± 5 , ± 12 , ± 15 Vdc
Efficiency:	Up to 86%
Warranty:	2 years

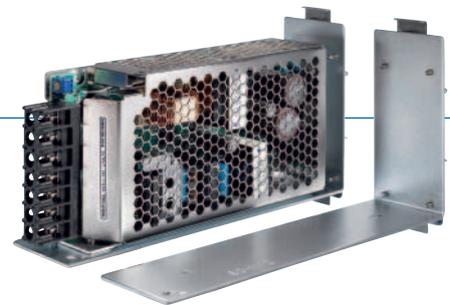
More information: www.uk.tdk-lambda.com/dpx

L-DIN – Series

DIN-Rail Adapters



Industrial



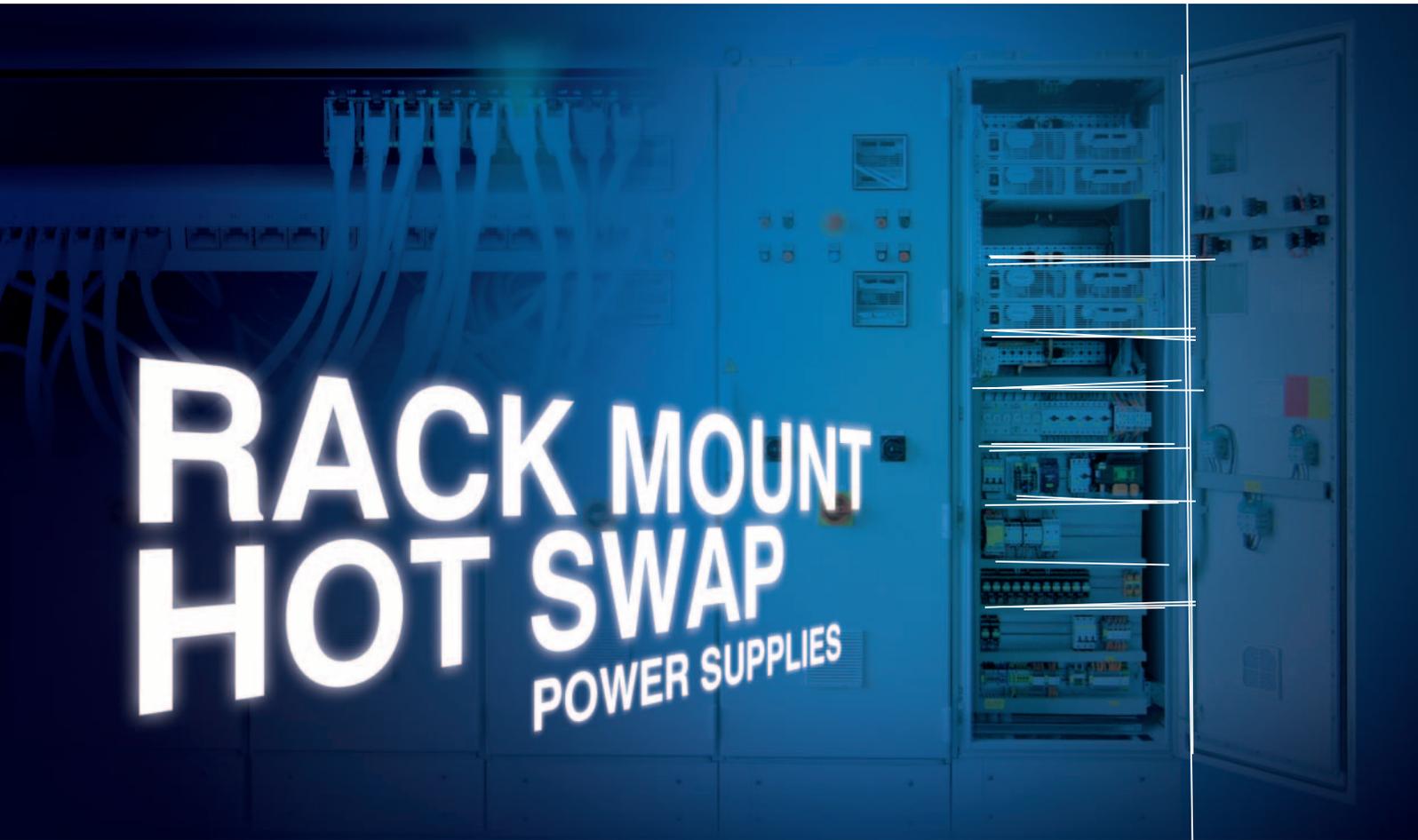
Mounting brackets with DIN-Rail clip to adapt standard build in power supplies on DIN-Rail.

Usable for special requirements on output voltage or features which are not available with standard DIN-Rail power supplies

Available for: HWS-15 to HWS-150
LS-25 to LS-150

Rack mount / Hot Swap Power Supplies

Highlights and Key Features



Applications

- High reliability applications with n+1 redundancy
- High power applications for cabinet mounting
- Broadcast, RF-amplifiers, Telecoms

Features

- 19" rack with hot-swap power modules – up to 10kW in 1U
- Modules have integrated ORing MOSFETs for redundant operation
- Individual IEC connectors or terminal blocks for mains input
- Parallel operation between racks with active current sharing for higher output power levels
- 12V, 24V, 32V and 48V outputs for bus-voltages in distributed power architecture and other applications
- Optional PM-bus I²C interface for status monitoring and control

HFE-1600 – Series

1600W



COTS



Industrial



Test



Broadcast



Comm



Redundancy: Internal ORing MOSFET & Current Share
High efficiency: Climate Savers Computing efficiency standards
Interface: PMBus option

Output power:	1600W single unit, up to 8kW in 19" 1U shelf
Input voltage:	85 – 265Vac, 47 – 63Hz
Output voltage:	12, 24, 32 or 48Vdc
Efficiency:	Up to 92%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/hfe

HFE-1600-S1U/-D1U – Series

6000 – 8000W



COTS



Industrial



Test



Broadcast



Comm



Rack mount

HFE-1600-S1U: Parallel operation up to 5 units HFE-1600 (8000W total)
HFE-1600-D1U: 2 separate outputs for 2x 2 units HFE-1600 (2x 3000W)
High efficiency: Climate Savers Computing efficiency standards
Interface: PMBus option

Output power:	Up to 8kW in 19" 1U shelf
Input voltage:	85 – 265Vac, 47 – 63Hz
Output voltage:	12, 24, 32 or 48Vdc
Efficiency:	Up to 92%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/hfe

HFE-2500 – Series

2500W



COTS



Industrial



Test



Broadcast



Comm



Redundancy: Internal ORing MOSFET & Current Share
High efficiency: Climate Savers Computing efficiency standards
Interface: PMBus option

Output power:	2500W single unit, up to 10kW in 19" 1U shelf
Input voltage:	85 – 265Vac, 47 – 63Hz
Output voltage:	12, 24, 32 or 48Vdc
Efficiency:	Up to 92.5%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/hfe

HFE-2500-S1U – Series

10000W



COTS



Industrial



Test



Broadcast



Comm



1U 19" shelf: Suitable for up to 4 power modules HFE-2500
High efficiency: Climate Savers Computing efficiency standards
Interface: PMBus option

Output power:	Up to 10kW in 19" 1U shelf
Input voltage:	85 – 265Vac, 47 – 63Hz
Output voltage:	12, 24, 32 or 48Vdc
Efficiency:	Up to 92.5%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/hfe

FPS-1000 – Series

1000W



COTS



Industrial



Test



Broadcast



Comm



Redundancy:

Build in ORing diode & Current Share

Interface:

I²C-bus option

AC-Input:

Via IEC connector on front panel or via Positronic connector in rack

Output power:	1000W single unit, up to 3kW in 19" 1U shelf
Input voltage:	85 – 264Vac, 47 – 63Hz
Output voltage:	12, 24, 32 or 48Vdc
Efficiency:	Up to 88%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/fps

FPS-S1U / FPS-T1U – Series

3000W



COTS



Industrial



Test



Broadcast



Comm



Rack mount

1U 19" shelf:

Suitable for up to 3 power modules FPS-1000

Shelf with three individual outputs or common bus bar

AC-Input:

Via IEC connector on rear or direct to FPS module front panel

Output power:	Up to 3kW in 19" 1U shelf
Input voltage:	85 – 265Vac, 47 – 63Hz
Output voltage:	12, 24, 32 or 48Vdc
Efficiency:	Up to 88%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/fps

Programmable Power Supplies

Highlights and Key Features



PROGRAMMABLE POWER SUPPLIES

Applications

- ATE Systems
- Battery simulation
- Component burn-in
- Plating and etching

Features

- Output voltage up to 600V, output current up to 1000A, power range from 200W to 15000W
- Constant voltage or constant current operation with automatic crossover
- Last setting memory stores latest settings when power supply is switched off
- Analogue programming and monitoring for output voltage and current with 0-5V or 0-10V scale
- Integrated RS232/RS485 (and USB for Z+) communication interface as standard
- IEEE, LAN and isolated analogue optional interfaces
- Comprehensive parameter setting menus via front panel or digital interface
- Parallel operation with active current share and advanced parallel mode
- Arbitrary function generation and storage on Z+
- Suitable for benchtop use or 19" rack integration

Z⁺ – Series

200 – 800W



Interfaces: RS232/RS485, USB, analogue (standard)
LAN, IEEE (optional)

Features: Arbitrary function generation and storage
Optional front panel output jacks

Output power:	200, 400, 600, 800W
Input voltage:	Single phase 85 – 265Vac, 47 – 63Hz
Output voltage:	10, 20, 36, 60, 100Vdc (higher voltages coming soon)
Efficiency:	Up to 86%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/zplus

ZUP – Series

200 – 800W



Interface: RS232/RS485, analogue (standard)
IEEE (with external controller)

Features: Optional front panel output jacks
Constant voltage / constant current

Output power:	200, 400, 800W
Input voltage:	Single phase 85 – 265Vac, 47 – 63Hz
Output voltage:	6, 10, 20, 36, 60, 80 or 120Vdc
Efficiency:	Up to 87%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/zup

GENH – Series

750W



Interface: RS232/RS485, analogue (standard)
LAN, IEEE (optional)

Case: Suitable for benchtop use or 19" rack

Output current: Up to 100A

Output power:	750W
Input voltage:	Single phase 85 – 265Vac, 47 – 63Hz
Output voltage:	6, 8, 12.5, 20, 40, 60, 80, 100, 150, 300 or 600Vdc
Efficiency:	Up to 87%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/genh

GEN 1U – Series

750 – 2400W



Interface: RS232/RS485, analogue (standard)
LAN, IEEE (optional)

Option: Integrated power sink

Output current: Up to 300A

Output power:	750, 1500, 2400W
Input voltage:	Single phase 85 – 264Vac, 47 – 63Hz (170 – 265Vac for 2400W) Optional three phase 170-265Vac for 2400W only
Output voltage:	6, 8, 12.5, 16, 20, 30, 40, 50, 60, 80, 100, 150, 300 or 600Vdc
Efficiency:	Up to 88%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/gen1u

GEN 2U – Series

3300 – 5000W



Interface: RS232/RS485, analogue (standard)
LAN, IEEE (optional)

Dynamic response: Fast speed option for Automotive test applications

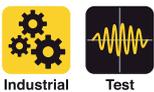
Output current: Up to 600A

Output power:	3300, 5000W
Input voltage:	Single phase 170 – 265Vac, 47 – 63Hz (3300W only) Three phase 170 – 265Vac or 342 – 460Vac
Output voltage:	8, 10, 15, 16, 20, 30, 40, 60, 80, 100, 150, 200, 300, 400, 500 or 600Vdc
Efficiency:	Up to 88%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/gen2u

GEN 3U – Series

10000 – 15000W



Interface: RS232/RS485, analogue (standard)
LAN, IEEE (optional)

Output current: Up to 1000A

Output power:	10000, 15000W
Input voltage:	Three phase 208Vac, 400Vac or 480Vac
Output voltage:	7.5, 10, 12.5, 20, 25, 30, 40, 50, 60, 80, 100, 125, 150, 200, 300, 400, 500 or 600Vdc
Efficiency:	Up to 88%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/gen3u

EVA2400 – Series

2400W



Industrial



Test



Build in model:	No front-panel ore display
Interface:	RS232/RS485, analog
Cooling:	Variable speed fan
Output:	Constant-voltage, constant current with automatic crossover

Output power:	2400W
Input voltage:	Single phase 170 – 265Vac, 47 – 63Hz
Output voltage:	150, 300, 600V
Efficiency:	Up to 88%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/eva

Line Filters

Highlights and Key Features



Applications

- Improve EMC-performance in complex equipment with lots of components
- Improve EMC-performance at long mains-wires

Features

- Single-Phase, Three-Phase and Three-Phase with Neutral
- 0.5A to 300A line current
- Single-stage and two stage filters with high attenuation over a wide frequency range
- With surge protection
- Medical versions with reduced leakage currents
- Models for DIN-Rail mounting

RSEL – Series

0.5 – 6A



Type: Single-phase filter
Attenuation: 70 – 80dB at ~1-6MHz
Construction: Single-stage
optional low leakage type

Current:	0.5, 1, 2, 3, 6A
Rated voltage:	250Vac
Connection:	Wire ore Faston
Warranty:	1 year

More information: www.uk.tdk-lambda.com/r-series

RSEN, RSAN, RSHN – Series

3 – 60A



Type: Single-phase filter
Attenuation: High attenuation over a wide frequency range
Construction: Single-stage ore two-stage
optional low leakage type and DIN-Rail mount

Current:	3, 6, 10, 16, 20, 30, 40, 50, 60A
Rated voltage:	250Vac
Connection:	Screw-terminals
Warranty:	1 year

More information: www.uk.tdk-lambda.com/r-series

RTEN, RTHN – Series

6 – 300A



Industrial



Test



Broadcast



Comm

Type:	Three-phase filter
Attenuation:	High attenuation over a wide frequency range
Construction:	Single-stage ore two-stage optional low leakage type and DIN-Rail mount

Current:	6, 10, 20, 30, 40, 50, 60, 80, 100, 150, 200, 300A
Rated voltage:	500Vac
Connection:	Screw-terminals
Warranty:	1 year

More information:	www.uk.tdk-lambda.com/r-series
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SIFI F, G, H – Series

3 – 36A



Industrial



Test



Broadcast



Comm



Type:	Single-phase filter
Attenuation:	High attenuation over a wide frequency range
Construction:	Single-stage ore two-stage optional low leakage type

Current:	3, 6, 10, 16, 20, 25, 36A
Rated Voltage:	250Vac, 50/60Hz and 250Vdc
Connection:	Faston ore screw-terminals
Warranty:	1 year

B84771-B84776 – Series

1 – 10(20)A



Industrial



Test



Broadcast



Comm



Types:	With IEC-Inlet With IEC-Inlet and fuse With IEC-Inlet, fuse and switch
Option:	Medical versions

Current:	1, 3, 6, 8, 10A (12, 15, 16, 20A)
Rated voltage:	250Vac, 50/60Hz
Connection:	IEC-input, Faston-output
Warranty:	1 year

DC-DC Converters

Highlights and Key Features

DC-DC CONVERTERS

Applications

- Distributed Power Architecture with DC Bus
- Small subsystems with battery backup

Features DC-DC Converters

- Galvanic isolation between input and output
- Power range from 1.5W to 700W
- Convection cooling, conduction cooling with baseplate or forced air cooling
- Input voltage ranges 2:1 or 4:1
- Nominal input voltages 5V, 12V, 24V, 48V, 110V or 280V

Features Point of Load Converters

- No galvanic isolation
- High efficiency
- Very fast transient response time
- SMT or through hole mounting
- Supply of logic voltages below 5V direct at the load

CC-E / CC-P-E – Series

1.5 – 30W



Industrial



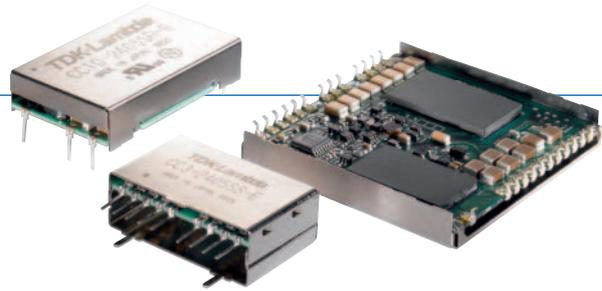
Test



Broadcast



Comm



Shape: SMT or through hole, flat profile
Single and Dual output

Trim: Adjustable output voltage

Isolation: 500Vac Input-Output

Output power:	1.5, 3, 6, 10, 15, 25, 30W, convection cooled
Input voltage:	5, 12, 24 or 48Vdc nominal
Output voltage:	3.3, 5, 12/15 or $\pm 12/15$ Vdc
Efficiency:	Up to 90%
Warranty:	5 years

More information: www.uk.tdk-lambda.com/cc-e

PXC – Series

3 – 6W



Industrial



Test



Broadcast



Comm

Shape: Industry Standard 24 Pin Dip Package
Through hole and SMT versions

Case: Five sided shielding

Input: Wide range 4:1

Output power:	3 – 6W, convection cooled
Input voltage:	9 – 36 or 18 – 75Vdc
Output voltage:	3.3, 5, 12, 15Vdc ± 5 V, ± 12 V, ± 15 Vdc
Efficiency:	Up to 82%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/pxc

PXA / PXB – Series

15W



Industrial



Test



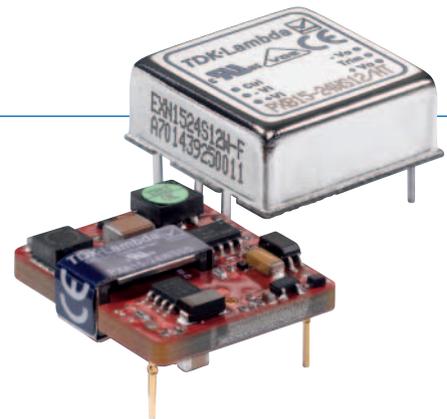
Broadcast



Comm

Shape: Standard industrial footprint 1" x 1"
PXA open frame
PXB six side shielding

Mounting: Pin and surface mount



Output power:	15W, convection cooled
Input voltage:	12, 24 or 48Vdc nominal 9 – 36 or 18 – 75Vdc
Output voltage:	3.3, 5, 12, 15Vdc
Efficiency:	Up to 88%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/pxa

PXD / PXE / PXF – Series

10 – 60W



Industrial



Test



Broadcast



Comm

Shape: Standard industrial footprint
2" x 1", 2" x 1.6", 2" x 2"

Input: 2:1 and wide range 4:1

Safety: International safety approvals



Output power:	10, 15, 20, 30, 40, 60W, convection cooled
Input voltage:	12, 24 or 48Vdc nominal 9 – 36 or 18 – 75Vdc
Output voltage:	3.3, 5, 12, 15Vdc
Efficiency:	Up to 89%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/pxd

CE-10xx – Series

1.5 – 2.5A



Industrial



Test



Broadcast



Comm



Shape: SMT-mounting, closed case
Height: Only 4.5 mm (5.5 mm for CE-1050)
Temperature: –40°C to +85°C
Non isolated output

Output current:	1.5, 2.5A
Input voltage:	3 – 5.25, 6 – 16, 9 – 26.4Vdc
Output voltage:	1.5 – 3.3, 3.3 – 5, 1.0 – 3.3, 3.3 – 12.6Vdc (adjustable)
Efficiency:	Up to 91.5%
Warranty:	1 year

More information: www.uk.tdk-lambda.com/ce

iCF / iCG – Series

3 – 6A



Industrial



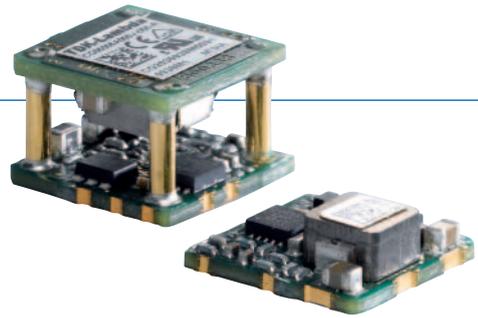
Test



Broadcast



Comm



Shape:	2nd generation DOSA
Regulation:	Excellent transient response
Soldering:	LGA or EPC format
	Non isolated output

Output current:	3 or 6A
Input voltage:	4.5 – 14Vdc
Output voltage:	0.7 – 5.5Vdc (adjustable)
Efficiency:	Up to 96.5%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/icf

iBF / iAF – Series

12 – 20A



Industrial



Test



Broadcast



Comm



Shape:	2nd generation DOSA
Regulation:	Excellent transient response
Soldering:	LGA or EPC format
	Non isolated output

Output current:	12, 20A
Input voltage:	4.5 – 14Vdc
Output voltage:	0.7 – 5.5Vdc (adjustable)
Efficiency:	Up to 93.5%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/ibf

iEA – Series

Up to 78W



Industrial



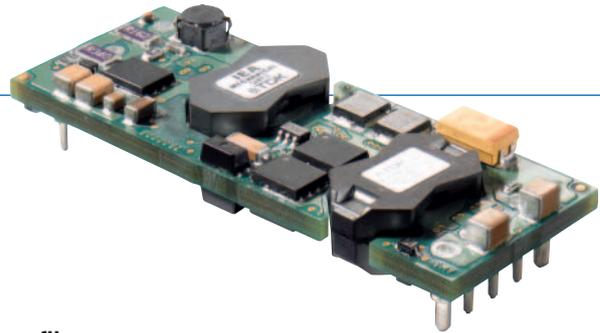
Test



Broadcast



Comm



Size:	Standard “eighth brick” format Open frame design, low 8.8mm profile
Mounting:	Through hole
Isolation:	1500Vdc basic isolation

Output power:	Up to 78W
Input voltage:	36 – 75Vdc or 18 – 60Vdc
Output voltage:	1.2, 1.5, 1.8, 2.5, 3.3, 5, 12, 15, 18 or 28Vdc
Efficiency:	Up to 90%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/iea

iQE / iQG – Series

Up to 400W



Industrial



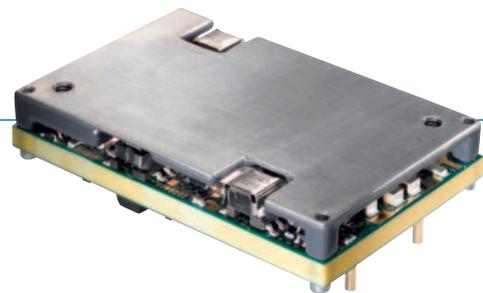
Test



Broadcast



Comm



Size:	Standard “quarter brick” format Open frame design, low profile
Soldering:	Through hole mounting
High Efficiency:	Up to 95%

Output power:	Up to 400W
Input voltage:	18 – 36, 18 – 60 or 36 – 75Vdc
Output voltage:	3.3, 5, 8, 9.6, 10.8, 12 or 15Vdc
Efficiency:	Up to 95%
Warranty:	3 years

More information: www.uk.tdk-lambda.com/iqe

CN-A – Series

30 – 100W



Industrial



Railroad



COTS



Size:	Standard “quarter brick” format
Shock/vibration:	EN/IEC 61373
Temperature:	Full power at 100°C (baseplate temperature)
Input voltage range:	EN 50155 / IEC 60571

Output power:	30, 50, 100W, conduction cooling
Input voltage:	60 – 160Vdc or 18 – 36Vdc (50W, 100W only)
Output voltage:	5, 12, 15 or 24Vdc
Efficiency:	Up to 88%
Warranty:	5 years

More information:	www.uk.tdk-lambda.com/cn-a
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CN-A – Series

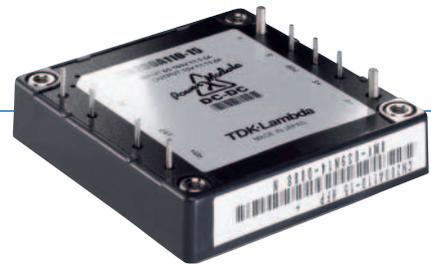
200W



Industrial



Railroad



Size:	Standard “half brick” format
Shock/vibration:	EN/IEC 61373
Temperature:	Full power at 100°C (baseplate temperature)
Input:	EN 50155 / IEC 60571

Output power:	200W, conduction cooling
Input voltage:	60 – 160Vdc
Output voltage:	5, 12, 15 or 24Vdc
Efficiency:	Up to 88%
Warranty:	5 years

More information:	www.uk.tdk-lambda.com/cn-a
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PAH – Series

50 – 450W



Industrial



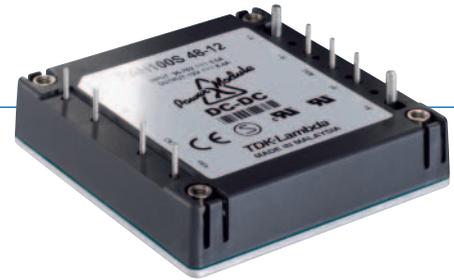
Test



Comm



COTS



Size:	Standard “half brick” format
Safety:	EN/UL/CSA 60950-1 approval
Temperature:	Full power at 100°C (baseplate temperature)
Output:	Wide adjustable voltage range

Output power:	50, 75, 100, 150, 200, 300, 350, 450W, conduction cooling
Input voltage:	24, 48Vdc nominal
Output voltage:	2.5, 3.3, 5, 12, 15, 24, 28 or 48Vdc
Efficiency:	Up to 92%
Warranty:	2 years

More information:	www.uk.tdk-lambda.com/pah
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PAF – Series

400 – 700W



Industrial



Test



Comm



COTS



Size:	Standard “full brick” format
Safety:	EN/UL/CSA 60950-1 approval
Temperature:	Full power at 100°C (baseplate temperature)
Output:	Wide adjustable voltage range

Output power:	450, 500, 600, 700W, conduction cooling
Input voltage:	24, 48, 280Vdc nominal
Output voltage:	12, 24, 28 or 48Vdc
Efficiency:	Up to 91%
Warranty:	2 years

More information:	www.uk.tdk-lambda.com/paf
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PH-A – Series

50 – 150W



Industrial



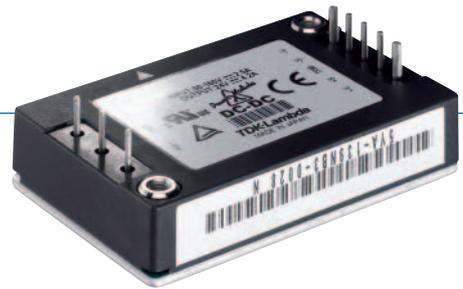
Test



Comm



COTS



Size:	Quarter-brick module with baseplate
Isolation:	High withstand voltage for PoE application
Safety:	EN/UL/CSA 60950-1 approval
Temperature:	Full power at 100°C (baseplate temperature)

Output power:	50, 75, 100, 150W, conduction cooling
Input voltage:	280Vdc nominal; range: 200 – 425Vdc
Output voltage:	5, 12, 24, 48Vdc
Efficiency:	Up to 90%
Warranty:	2 years

PH – Series

50 – 600W



Industrial



Test



Comm



COTS



Size:	Brick modules with baseplate
Output:	Wide adjustable voltage range
Models:	Broadest range of input/output voltages Power levels and functions

Output power:	50, 75, 100, 150, 300, 600W, conduction cooling
Input voltage:	24, 48, 110, 280Vdc nominal
Output voltage:	2, 3.3, 5, 12, 15, 24, 28 or 48Vdc
Efficiency:	Up to 88%
Warranty:	2 years

More information: www.uk.tdk-lambda.com/ph

Value Added Solutions

Highlights and Key Features



Value Added Solutions

- Full custom design
- Customized modifications based on standard power supplies
- Add-ons like cable-looms, mounting brackets, filtering
- Complete systems in 19" cabinets
- PCB-design for DC/DC power modules
- Assistance for safety assessment on end equipment
- EMC optimisation on end-application

Value added and customised design

examples 5 – 15000W



1



2

Analysis applications (Fig. 1)

Power supplies for various applications: Flexible use in different systems with 5 output voltages. The standard power supply has an IEC input connector, DC cabling and a customised cooling concept.

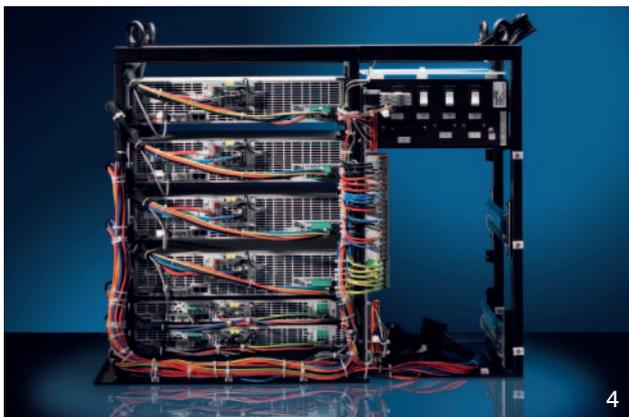
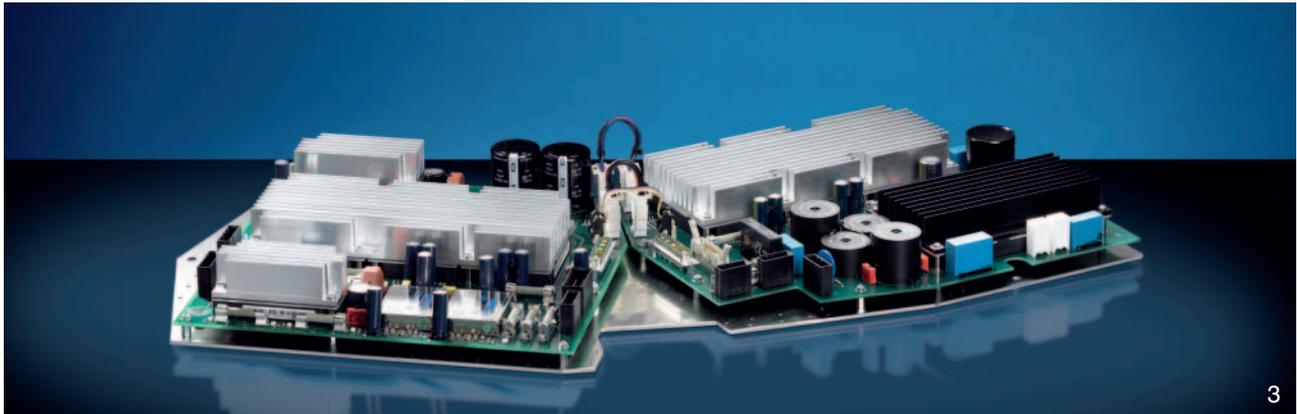
Medical applications (Fig. 2)

High Transportation Safety: The MRT Ramp Up Power Supply system is designed for a withstand repeated shipping, rough handling and vibration.

The Power Modules have comprehensive front panel controls with individual rotary encoders for output current and voltage and extensive self-test and quality control functions.

Value added and customised design

examples 5 – 15000W



Medical applications (Fig. 3)

Fast acceleration forces: Individual solutions are a standard at TDK-Lambda. In this application, the power supply including its components is part of the rotating gantry and thus has to cope with high speeds of rotations. The multiple output voltages specified by the customer are realized using standard components, taking advantage of the easy-to-install modular technology.

Medical applications (Fig. 4)

Harsh environment conditions: Your application requires a controllable power supply that works reliably under harsh electromagnetic conditions. The programmable Genesys™ series delivering up to 16kW provides what you need.

Food industry (Fig. 5)

High safety level: For best user protection according to the IP classifications, a modified HWS-300 standard power supply (240W) was built into an IP54 enclosure. The protection enclosure protects the operating personnel and additionally matches specific functional requirements in a harsh environment with extraordinary thermal impacts.

Measuring (Fig. 6)

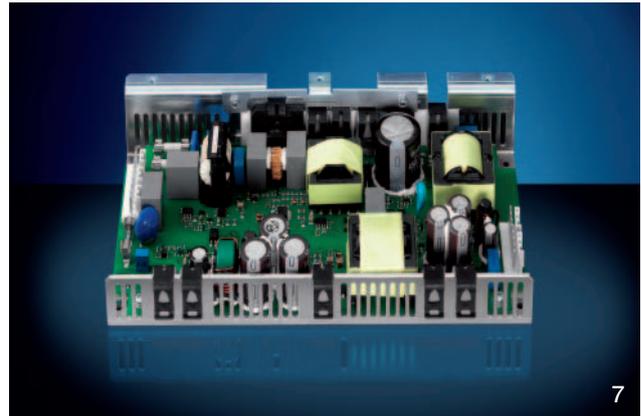
Universal applicability: Another innovative concept is employed in this equipment. Depending on your requirements, you are flexible to choose between an AC power supply from our standard range and a customised power supply with DC input with a minimum manufacturing level. Your advantage: Both variants have the same terminal block and the same volume.

Value added and customised design

examples 5 – 15000W



6



7



8

Display (Fig. 7)

Specifically for maritime applications: A common challenge in maritime applications is the need to cope with extreme operating temperatures, saline air, erosion, considerable vibrations and shocks. In addition, large-area electromagnetic interferences (EMI) may occur, which can obstruct the orderly operation of the equipment. Specifically for requirements like this, TDK-Lambda has developed a high-performance multi-power supply with AC and DC input and 130W output power.

A special coating protects the unit from a highly polluted atmosphere – a fundamental precaution for a long-lasting, reliable and particularly maintenance-free performance.

Vending and ticketing (Fig. 8)

Rapid integration: As a tailored solution to match the customer requirement for limited output power (NEC class 2), the HWS-150 standard power supply was built into a customer-specific metal enclosure and was equipped with specific connection cables and connectors. Result: Easy installation and connection.

TDK-Lambda – Global Operations





Please contact your local sales office to find the best solution to your application.



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