

# Product Overview

## AC-DC Chassis mount – Single output

	LS	CSW65 <b>NEW</b>	CUS/LD/M <b>NEW</b>	GWS	EFE/M	SWS-L	HWS-A/HD/P/ME	RWS-B / ME	GXE600 <b>NEW</b>	RFE	TPS3000	CPFE/Fi	EVS	ZPSA	ZMS100	ZWS/B BAF/BP
<b>Cooling</b>	⬇️*	⬇️	⬇️*⬆️⬆️	⬇️*	⬇️*	⬆️	⬇️*	⬇️*	⬇️	⬆️	⬆️	⬆️	⬇️*	⬇️	⬇️	⬇️
<b>Output power</b>	25 – 200W	40 – 65W	30 – 1500W	250, 500W	300, 400W	600, 1000W	15 – 1500W	50 – 1500W	600W	1000, 1600, 2500W	3000W	1000W	300, 600W	20 – 100W	100W	10 – 300W
<b>Main features</b>	Cost optimized	90 – 305Vac AC Input DOE Level VI, ErP Tier 2 DIN Rail mount option	LD: 200, 250W · M: 30, 60, 100, 150, 200, 350, 1500W up to 94% efficiency low profile	ErP compliant Class C Harmonics (IEC 61000-3-2) > 25% Load	Full digital control high power density	Low profile –40°C start up –20°C to 74°C operating	HD: Harsh environment, P: Peak power for 5sec ME: Medical very high reliability	Compact size 10-year +e-cap lifetime	Digital (RS-485) and analogue programming CV, CC mode up to 95% efficiency	1U · current share optional: PM Bus, internal Oring diodes	400/480 VAC 3phase voltage and current programming	Fanless · diode ORing – share option I2C interface	Constant current source	2x3.5" (20W) 2x4" (40/60W) 3x5", (100W) very low height profile	Long e-cap lifetime 2x MoPP isolation ceramic start-up cap	Long e-cap lifetime
<b>Warranty</b>	5 years	3 years	3, 5, 7 years	5 years	5 years	2 or 3 years	<b>Leading warranty *</b>	7 years	7 years	2 or 3 years	3 years	2 years	5 years	2 years	3 years	5 years

## AC-DC Chassis mount – Multiple output

	ZP/D/T	ZWQ	CUT	VEGA	ZWD-PAF	NV /M	NV/M	EFE/M	XMS500	QM <b>NEW</b>	QS5/QS7 <b>NEW</b>	VEGA	DT/DTM
<b>Cooling</b>	⬇️	⬇️	⬇️	⬆️*	⬇️	⬆️⬆️*	⬆️⬆️*	⬆️*	⬆️*	⬆️*	⬆️*	⬆️*	⬆️*
<b>Output power</b>	40W	80 – 170W	35, 75W	450 – 900W	100 – 440W	175 – 960W	175 – 960W	300, 400W	500W	700 – 1500W	600 – 1200W	450 – 900W	65, 110, 165, 250, 300W
<b>Main features</b>	Dual & triple outputs	1U height versions 4 outputs	3 outputs 2x4" and 3x5" footprint individual output regulation low profile (1.06")	1 – 11 outputs configurable	2 outputs 200% peak power capability	1 – 8 outputs configurable	1 – 8 outputs configurable	Full digital control high power density	Single output suitable for 1U low airflow requirement	1 – 18 outputs Very low audible noise	Single output low audible noise dual or single fusing <b>PMBus</b>	1 – 11 outputs configurable <b>PMBus</b>	Single output ErP compliant
<b>Warranty</b>	2 years	1 years	3 years	3 years	2 years	3 years	3 years	5 years	5 years	7 years	7 years	3 years	2 or 3 years

## AC-DC DIN Rail

	DRL/C2	DRB <b>NEW</b>	DRF/HL <b>NEW</b>	DRM40 <b>NEW</b>	DPX
<b>Cooling</b>	⬇️	⬇️	⬇️	⬇️	⬇️
<b>Output power</b>	10, 30, 60, 88, 100W	15, 30, 50, 100, 120, 240, 480W	120, 240, 480, 960W	2x20A / 1x40A	15 – 60W
<b>Main features</b>	Class II · ErP compliant low profile: 56mm	ErP compliant compact footprint excellent efficiency	150% peak load, 4sec remote prog. HL models: IECEx/ ATEX/HazLoc, DNV/GL	Redundancy module 150% peak load, 4sec –40 ~ +70°C ambient	Input: 24/48VDC Output: 1.2 – 30V
<b>Warranty</b>	3 years	3 years	5 years	5 years	2 years

## AC-DC Rack mount

	FPS	HFE
<b>Cooling</b>	⬆️	⬆️
<b>Output power</b>	1000W	1600, 2500W
<b>Main features</b>	Single output · up to 3000W 3 units in 19" Rack · hot swap optional: I2C bus	Single output · 8kW in 5 slot 19" 10kW in 4 slot 19" · hot swap optional: PMBus™, LAN <b>PMBus</b>
<b>Warranty</b>	2 years	3 years

## AC-DC PCB mount – Single / multiple output

	PFE	PFH500 <b>NEW</b>	PF-A	KPSA	KMS-A/KMD/KMT	KWS-A	KAS
<b>Cooling</b>	⬆️	⬆️	⬆️	⬇️	⬇️	⬇️	⬇️
<b>Output power</b>	300 – 1000W	500W	500, 1000W	5 – 15W	15 – 60W	5, 10, 15, 25W	2, 4W
<b>Main features</b>	Operating up to 100°C baseplate · PFC high efficiency	101.6 x 61.0mm size PMBus™ communication (read-write) · High effi- ciency up to 92% <b>PMBus</b>	Low profile 750 or 1500W max. output power PFC front end	Single output · no external components needed · open frame	2x MOPP isolation protection class II	Single · dual output protection class II efficiency values up to 88%	90 – 305VAC protection class II
<b>Warranty</b>	2 or 5 years	3 years	2 years	2 years	2 or 3 years	3 years	3 years

## AC-DC Programmable

	Genesys+™ <b>NEW</b>	Genesys™	Z+	ZUP
<b>Cooling</b>	⬆️	⬆️	⬆️	⬆️
<b>Output power</b>	1700 - 15.000W	750 – 15.000W	200, 400, 600, 800W	200, 400, 800W
<b>Main features</b>	1.7kW – 5kW in 1U, 10kW in 2U, 15kW in 3U · up to 20kW in 4U / 19" · 0 – 600V CV, CC, CP operation mode · arbitrary waveform · built-in USB, RS232/485, LAN (up to 1.5) isolated analogue · options: IEEE, Anybus, blank panel, dust filter	1U, 2U, 3U · 0 – 1500V · bench, rack (19") · built in RS-232/485, analogue · options: LAN, IEEE, Power Sink, Fast speed, isolated analogue · extension: <b>i-SINK</b> function (electronic power sink)	2U · 0 – 650V · bench, 2U rack mounted (6 units) · built in USB, RS232/485, analogue · integrated arbitrary function · options: LAN, IEEE, isolated analogue, front panel output sockets	3U · 0 – 120V · bench, 3U rack mounted (3 / 6 units) · built-in RS232/485, analogue options: IEEE (external), front panel output sockets
<b>Warranty</b>	5 years	5 years	5 years	3 years

**DC-DC Isolated Brick Modules**

	iSA	iEA/IEE/IEF	iQB/iQE/iQL	PH-A 50	PH-A 300	iHG	PAF
	1/16 Brick	1/8 Brick	1/4 Brick	1/4 Brick	1/2 Brick	1/2 Brick	Full Brick
<b>Cooling</b>							
<b>Output power</b>	25 – 83W	50 – 240W	15 – 300W	50 – 150W	300W	50 – 450W	450 – 700W
<b>Output voltage</b>	Input: 48VDC Output: 3.3 – 12V	Input: 24/48VDC Output: 1.2 – 28V	Input: 24/48VDC Output: 1.2 – 28V	Input: 280VDC Output: 3.3 – 48V	Input: 280VDC Output: 12 – 48V	Input: 24/48VDC Output: 1.2 – 48V	Input: 24 – 280VDC Output: 12 – 48V
<b>Warranty</b>	3 years	3 years	3 years	5 years	5 years	3 years	2 years

**DC-DC Isolated Intermediate Bus Architecture Converters**

	iEH	iQL/iQG	iHG	iFB
	1/8 Brick	1/4 Brick		
<b>Cooling</b>				
<b>Output power</b>	300W	250 – 540W	300 – 450W	500 – 600W
<b>Output voltage</b>	Input: 48VDC Output: 9.6 – 12V	Input: 48VDC Output: 9.6 – 12V	Input: 48VDC Output: 12V	Input: 48VDC Output: 9.6 – 12V
<b>Warranty</b>	3 years	3 years	3 years	3 years

**DC-DC Isolated Industrial DC-DC Converters**

	CC-E/CC-P-E	CC-G	PX
<b>Cooling</b>			
<b>Output</b>	1.5 – 30W	15 – 30W	5 – 60W
<b>Main features</b>	Input: 5 – 48VDC 1 – 2 Outputs: 3.3 – 15V	4:1 Input 24/48V Output: 3.3 – 15V Single and dual output	Input: 12/24/48VDC 1 – 3 Outputs: 1.5 – 15V
<b>Warranty</b>	5 years	5 years	2 years

**DC-DC Isolated Medical**

	PXC /M
<b>Cooling</b>	
<b>Output</b>	3 – 10W
<b>Main features</b>	4:1 Input 24/48V 1 – 2 Outputs: 3.3 – 24V High isolation
<b>Warranty</b>	2 years

**DC-DC Non-isolated – POL Modules**

	iAH/ iBH /iCH	i3A, i6A	iJA/iJB/iJC
<b>Cooling</b>			
<b>Output</b>	2nd + Gen DOSA 12 – 40A	Industrial POL 4.5 – 20A	POL 35A, 60A, 100A
<b>Main features</b>	Input: 4.5 – 14V Output: 0.6 – 8.5V	Input: 9 – 53V Output: +/-3.3 – 30V	Input: 8.0 - 14.0VDC Output: 0.6 -3.3V
<b>Warranty</b>	3 years	3 years	3 years

**Application Specific Modules**

	DPX (Din-Rail)	Vega (Modular)	CN-A (Railway)	EZA (Renewable)	HQA (Harsh environment)	GQA <i>NEW</i>
<b>Cooling</b>						
<b>Output power</b>	15 – 60W	370 – 450W	30 – 200W	2500, 11000W	85, 120W	120W
<b>Main features</b>	Input: 24/48VDC Output: 1.2 – 30V	Input: 34 – 75VDC 1 – 11 Outputs: 1.8 – 56V	Input: 24/110VDC Output: 5 – 24V	Input: 320V/48V or 320/240V Bi-directional DC-DC Converter	Input: 10 – 40V Output: 5 – 48V –55 to 115°C baseplate temperature	Input: 9 – 36V Output: 5 – 48V –40 to 105°C baseplate temperature
<b>Warranty</b>	2 years	3 years	5 years	5 years	3 years	3 years

**EMC-Line Filters**

	RT	RS
<b>Current</b>	6 – 1000A	0.5 – 300A
<b>Voltage</b>	500V	250V
<b>Features</b>	3-phase conform to ENEC, UL, CSA, RoHS low leakage	1-phase conform to ENEC, UL, CSA, RoHS low leakage
<b>Warranty</b>	5 years	5 years

**DC-DC EMC-Filter**

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

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

**Modified standard**

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

**Full custom design to customer specification**

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

TDK-Lambda Corporation, a group company of TDK Corporation, is a leading global power supply company providing highly reliable power supplies worldwide used for a wide spectrum of industrial and medical applications.