




Power Supplies, DC/DC Converters and CCFL Inverters

e-material
solution provider





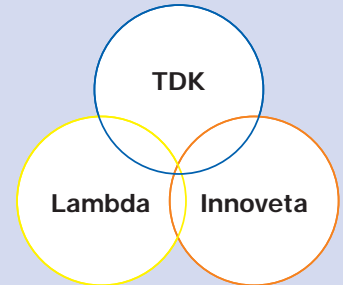
This short form catalogue is a summary of the CCFL DC/AC inverters, AC/DC and DC/DC telecom oriented products from the much broader range of TDK power conversion products.

AC/DC Power Supplies	1
DC/DC Converter	8
Value Added AC/DC & DC/DC	18
Inverter for LCD Backlight Applications	20

About TDK-Lambda

Strengthening our cooperation / integration for customer's satisfaction

- Product line-up
- Brand convergence
- WW Design & Manufacturing
- Sales support & logistics
- Competitive products
- Environmental/safety standards



New Product Introduction

NEW

Targeting the high power, very small space, tough thermal environment applications the iSA range of converters allows designers to provide levels of power normally associated with 1/8B products in DOSA 1/16B footprint.

The new PFE-series of high power 300W to 700W AC input modules offers a ONE-Brick solution with regulated or non regulated outputs at 48V, 28V and 12V.

TDK is expanding the 1/8Brick range with 24V input modules providing 50W output power at 5V or 6V. The high power 1/2 brick product line up is further expanded by the addition of a 450W rated product with either 24 or 48V nominal outputs.

Front-End Power Supplies

No.1 in the world in power density. AC/DC front-end power supply packaged in 1U rack size. 1000W max. with universal input.

FPS Series

FPS series will contribute to space saving on rack mount requirement in telecommunication and data communication equipment. Low profile, 3000W AC/DC front-end power supply in 1U/19" rack (by driving 3 units).



Model	FPS-1000-48	FPS-1000-32	FPS-1000-24
Nominal output voltage	48V	32V	24V
Output voltage adj. range	43V ~ 58V	28.8V ~ 38.4V	21.5V ~ 29V
Nominal output current	21A	31A	40A
Maximum output power	1008W	992W	960W
Input voltage	85 - 265VAC, 47 ~ 63Hz, single phase		
Efficiency (typ)	85/88 % at 100/200VAC, maximum output power, Ta = 25°C		
Protection	Over current protection, Over voltage protection, Over temperature protection		
Front panel LED indicators	AC OK (green), DC OK (green), DC FAIL (red)		
Operating ambient temp.	0 ~ 50°C (byx internal Fans. Variable speed control)		
Dimensions (W x H x D)	127 x 41 x 290mm, refer to outline drawing		
Interface	I ² C Interface bus: optional model (/S)		
Front IEC inlet	Front IEC Inlet : optional model (/P) Standard: rear connector		



NV Series Configurable Power Supplies

This model is specially designed for distributed power architectures. It provides a 12V/29A (350W) main output with a additional 12V auxiliary supply. The unit has a class leading efficiency of 91%.

Compared with the NV-350 standard unit, the FEP has only a depth of 236mm (46mm shorter).

Series	NV350-FEP
Power	350W
Number of outputs	2
Output voltage	12V
input voltage	90 - 264VAC
Format	closed case
Warranty	3 years



Configurable Power Supplies

NV Power 175/300 W

NV Power is based around a configurable planar transformer, and employs Multiple Efficiency Gain (MEG) technology to achieve its class leading efficiency for multiple output PSUs.

The TDK-Lambda approach is essentially a unique use of synchronous rectifiers in a resonant topology. The NV-300 and the NV-175 both boast class leading power densities: 6.6W/in³ for the sub 400W modular and 9.36W/in³ for the multi-output sub 200W supplies.

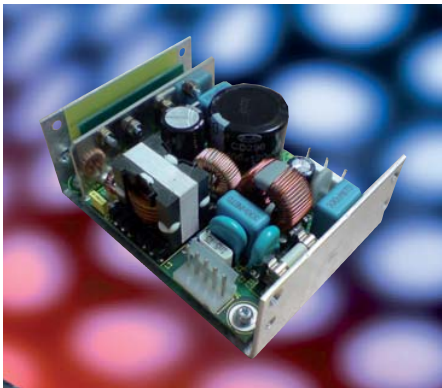


Series	NV Power 175W	NV Power 300W
Power	175/200W	300W
Number of outputs	1 - 5	1 - 5
Output voltage	1.5 - 28	1.5 - 28
Format	Open frame / closed case	Open frame / closed case
Warranty	3 years	3 years

Additional outputs will be available soon. Please ask our Technical Sales for status.



NV175 is available with integrated temperature controlled cooling fan.



A DC input module (36-72 volts DC input, 220 volts DC output at 225W) is available for use with the NV 175 series.

Modular Power Supplies

NV Power 350/700 W

Series	NV Power 350W	NV Power 700W
Power	350W	700W
Number of outputs	1 – 6	1 – 8
Output voltage	3.2 – 32V	3.2 – 32V
Format	Open frame / closed case	Open frame / closed case
Warranty	3 years	3 years

Additional outputs will be available soon. Please ask our Technical Sales for status.



Vega Lite

Vega Lite is the furious improvement of the existing Vega range. The output power increased to 500 watts and 700 watts (up to 900 watts at highline-input) within the same case.

Vega Lite offers up to 11 outputs in a range between 1.8V and 56V with industry leading power density.

Worldwide safety approvals and CB-reports for industrial and medical Safety standards enables this power supply to be used in a brought range of industrial and medical applications.

Series	Vega Lite
Power	550, 750W
Power at highline input	700, 900W
Number of outputs	1 - 11
Output voltage	1.8 - 56V
Input voltage	Wide range 85 - 265VAC
Input voltage highline	170 - 265 VAC
Format	Closed case
Warranty	3 years



Modular & Triple Output Power Supplies

Alpha

Alpha is a real “powerpack”, with our 1500W model offering up to 16 different outputs, with voltage ranging from 1.8 to 48V. The 1000W and 1500W power ranges available cover a wide range of applications. Fast-On terminals ensure quick installation of Alpha into customers' applications.



Series	Alpha
Power	1000, 1500W
Number of outputs	1 - 16
Output voltage	2 - 48V
Input voltage	Wide range 85 - 265VAC
Format	Closed case
Warranty	3 years

MTW Series Triple Output Power Supplies

The MTW series of 15 to 60W low profile triple output units fit within the 1U rack format.

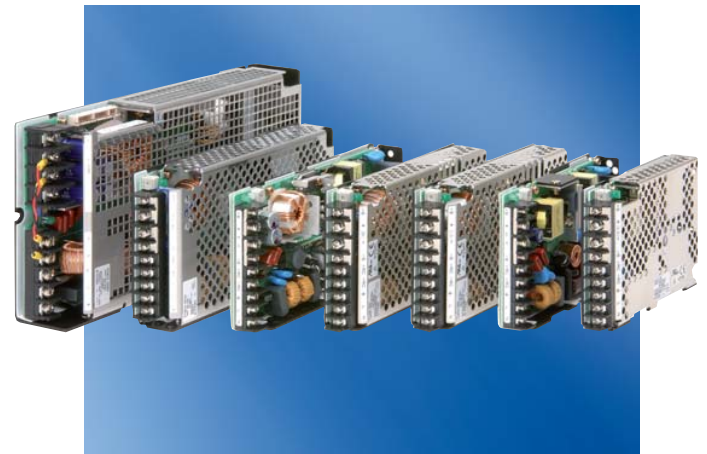


Part No.	MTW15-51212	MTW30-51212	MTW60-51212
Output voltage (V)	Current (A)		Current (A)
V1= +5.0	2.0 (Peak 3.0)	3.0 (Peak 4.5)	5.0 (Peak 7.0)
V2= +12.0	0.3 (Peak 0.6)	1.2 (Peak 2.0)	2.5 (Peak 3.5)
V3= -12.0	0.2 (Peak 0.3)	0.3 (Peak 0.45)	5.0 (Peak 07)

Single Output Power Supplies

RTW Series

The RTW series of single ultra low output power supplies (50 to 300W) will all fit within a 1U rack format and are designed for no fan or low airflow applications.



50W Type

Output voltage (V)	Current (A)	Part No. without cover	with cover	L type*
3.3	12.5	RTW03-12R	RTW03-12RC	RTW03-12RL
5	10	RTW05-10R	RTW05-10RC	RTW05-10RL
12	4.3	RTW12-4R3	RTW12-4R3C	RTW12-4R3L
15	3.5	RTW15-3R5	RTW15-3R5C	RTW15-3R5L
24	2.2	RTW24-2R2	RTW24-2R2C	RTW24-2R2L
28	1.8	RTW28-1R8	RTW28-1R8C	RTW28-1R8L
48	1.1	RTW48-1R1	RTW48-1R1C	RTW48-1R1L

100W Type

Output Voltage (V)	Current (A)	Part No. without cover	with cover	L type*
3.3	25	RTW03-25R	RTW03-25RC	RTW03-25RL
5	20	RTW05-20R	RTW05-20RC	RTW05-20RL
12	8.4	RTW12-8R4	RTW12-8R4C	RTW12-8R4L
15	6.7	RTW15-6R7	RTW15-6R7C	RTW15-6R7L
24	4.2	RTW24-4R2	RTW24-4R2C	RTW24-4R2L
28	3.6	RTW28-3R6	RTW28-3R6C	RTW28-3R6L
48	2.1	RTW48-2R1	RTW48-2R1C	RTW48-2R1L

150 – 300W Type

Output Voltage (V)	150W Current (A)	Part No. with cover	300W Current (A)	Part No. with cover
3.3	35	RTW03-35RC	70	RTW03-70RH
5	30	RTW05-30RC	60	RTW05-60RH
12	12.5	RTW12-12RC	25	RTW12-25RH
15	10	RTW15-10RC	20	RTW15-60RH
24	6.3 (Peak 10)	RTW24-6R3C	13 (Peak 20)	RTW24-13RH
28	5.4	RTW28-5R4C	11	RTW28-11RH
48	3.2	RTW48-3R2C	6.5	RTW48-6R5H

Conformity to RoHS Directive: this means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

Single Output Power Supplies

HWS Series

Designed to comply with ROHS directive. 60% smaller in volume than former product because of high efficiency design. Seven models from 15W to 1500W provide output voltages from 3.3V to 48V.

Series	HWS
Power	15 - 1500W
Number of outputs	1
Output voltage setting range	3.3 - 48V
Input voltage	Wide range 85 - 265VAC
Format	Closed
Warranty	5 years



HWS/HD Series

HWS for harsh environments. Guaranteed startup at -40°C , PCB coating and shock and vibration tests in accordance with MIL-standards enables the use of this power supply under heavy duty conditions.



Laboratory Supplies

Programmable power supplies for test and laboratory. Control all functions of the power supply from a Windows PC. Software download on the TDK-Lambda homepage for free.

Genesys™

Rackmounted power of 1500W, requires only 1U. Fully equipped with RS232/485 interface, analogue programming and monitoring capability. Integrated GPIB interface optional. 750W versions in half 19" rackmount dimensions (1/2 width) for building up dual units, requiring 1U space in the 19" rack or to be stacked as tower model. All Genesys units can be integrated into racks without requiring additional interspace for cooling.



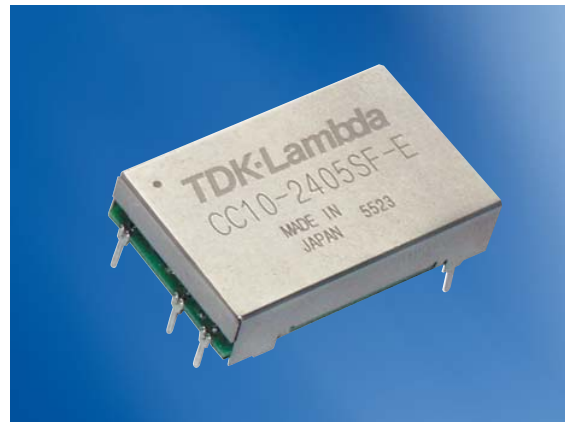
Series	GENH	GEN NEW
Rated output power	750 W	750, 1500, 3300W
Output voltage	0 - 6 to 0 - 600VDC	0 - 6 to 0 - 600 VDC
Output current	1.3 - 100 A	1.3 - 400 A
Programming	RS232/RS485 analogue 0 - 5V or 0 - 10V GPIB optional	RS232/RS485 analogue 0 - 5V or 0 - 10V GPIB optional
Resolution for digital programming	0.002 % of V_{out} max	0.002 % of V_{out} max
Input voltage	Wide range 85 - 265 VAC	Wide range 85 - 265 VAC
Format	1/2 19" 1U	19" 1U (750, 1500W) 19" 2U (3300W)
Warranty	5 years	5 years

DC-DC Converters

CC-E Converters

The CC-E converters range in size from 16.5 x 16.6mm to 43 x 45mm, with a max. height of 8.5mm, depending on the output power rating of the product selected.

- Compact footprint / Low profile
- Through hole or SMT versions
- 5V, 12V, 24V and 48V inputs
- 3.3 to 30V¹ single, ± 12 to 15V dual outputs
- Output voltage adjustment
- Input – output isolation
- RoHS compliant
- 5 years warranty



Features

- Compact
- Self contained
- Multiple input voltage configurations
- Open frame (no potting)

Benefits

- Less pcb area used
- Requires no external components
- Easier system configuration
- Lighter in weight, suitable for surface mount (R version)
- Suitable for pick and place

CC-E Converters – Single Output

Product family	CC-E	CC-E	CC-E	CC-E	CC-E	CC-E
Output power W	1,5	3	6	10	15	25
Number of outputs	1	1	1	1	1	1
Output voltages V	3.3 - 30	3.3 - 30	3.3 - 30	3.3 - 30	3.3 - 5	3.3 - 5
Output currents mA	100 - 400	200 - 800	400 - 1200	800 - 2500	3000 - 4500	5000 - 7500
Input voltage V	5, 12, 24, 48	5, 12, 24, 48	5, 12, 24, 48	5, 12, 24, 48	24	24
Format	Shielded, through hole or surface mount					

Onboard Power, 'Brick' and POL Converters

Offering excellent efficiency and innovative designs these modules lend themselves to a wide range of applications demanding reliability and quality under adverse environmental conditions.

With a wide range of additional options found on the full data sheets, the products provide excellent solutions to power conversion challenges.



DC-DC Converters

Point of Load and Bus Converter

iBA / iBC Series – Single Output up to 35W

- Surface mountable
- High efficiency – up to 95%
- Up to 35W of power
- Maximum weight 7g (0.25oz)
- iBC Series offers tracking pin
- Sizes: iBA 20.3 x 11.4 x 8.76mm,
iBC 27.9 x 11.4 x 8.38mm

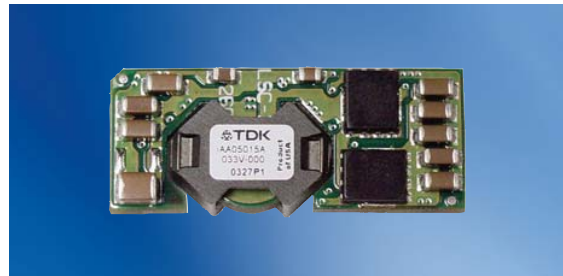


Product	Input voltage	Output voltage	Output current	Format
iBA05008A008V	3.0 - 5.5V	0.75 - 3.63V	8A	Open frame, SMT
iBC12007A008V	6.0 - 14V	0.75 - 5.5V	7A	Open frame, SMT

Point of Load and Bus Converter

iAA / iAC Series – Single Output 80W

- Surface mountable
- High efficiency – up to 95%
- Up to 80W of power
- iAC Series offers tracking pin
- Size: 33 x 13.5 x 8.5mm

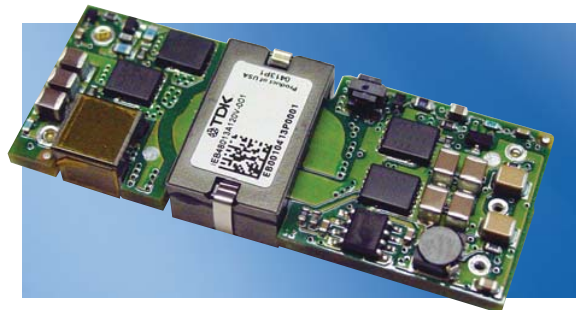


Product	Input voltage	Output voltage	Output current	Format
iAA05015A008V	4.5 - 5.5V	3.3V	15A	Open frame, SMT
iAA05015A025V	3.0 - 5.5V	2.5V	15A	Open frame, SMT
iAA05015A008V	3.0 - 5.5V	0.75 - 3.63V	15A	Open frame, SMT
iAC12016A008V	6.0 - 14V	0.8 - 5.0V	16A	Open frame, SMT

Intermediate Bus Converter Fixed Ratio Series

iEB Series – 150W, 1/8B

- Low Profile, 8.5mm (0.335")
- High efficiency – greater than 94%
- Up to 150W of power
- 4:1 Conversion Ratio resulting in 12V nominal output
- Size: 58.42 x 22.86 x 8.5mm



Product	Input voltage	Output voltage	Output current	Format
iEB48013A120V	42 - 56V	12V	13.5A	Eighth brick open frame

DC-DC Converters

Intermediate Bus Converter Fixed Ratio Series

iQD Series – 300W, 1/4B

- Low Profile, 9.65mm (0.38")
- High efficiency: 95%
- Up to 300W of power
- 4:1 Conversion Ratio resulting 12V nominal output
- Size: 57.91 x 36.83 x 9.65mm

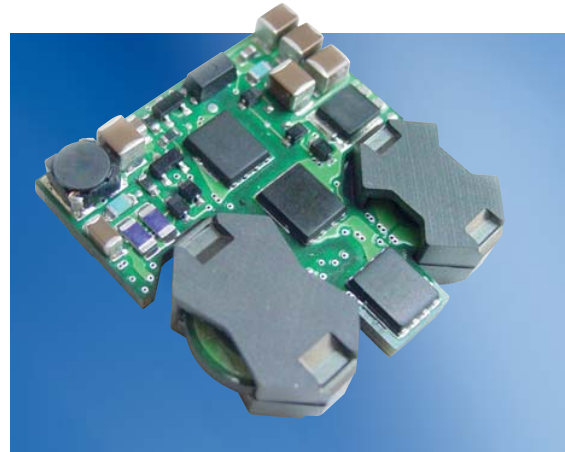


Product	Input voltage	Output voltage	Output current	Format
iQD48025A120V	42 - 53V	12V	27A	Quarter brick open frame

Pico Brick

iPB Series – Single Output 48W

- Surface mountable
- Up to 48W of output power in high ambient temperature, low airflow environments with minimal power derating
- Size: 30.5 x 29.3 x 8.1mm



Product family	iPB
Output power W	15 - 48
Number of outputs	1
Output voltage V	1.5 - 15
Output current A	3 - 10
Input voltage V	36 - 75
Format	Smt open frame

DC-DC Converters

Sixteenth Brick

iSA Series – Single Output 30A/82W

- More usable power than many eighth bricks in a 44% smaller footprint
- High efficiency – greater than 89%
- Meets basic insulation spacing requirements
- Industry Standard Footprint (DOSA)
- Choice of remote on/off configuration
- Constant switching frequency
- Output voltage adjustment
- Size: 33 x 22.9 x 12.7 mm



Product Family	iSA
Output Power W	30 - 82.5
Number of outputs	1
Output Voltage V	1.2 - 12
Output Current A	6.5 - 30
Input voltage V	36 - 75
Format	1/16B open frame

Eighth Brick

iEA / PAE Series – Single Output 25A/78W

- Output power of a Quarter Brick, 40% smaller
- High efficiency – greater than 89%
- Meets basic insulation spacing requirements
- Industry Standard Through-Hole Footprint
- Choice of remote on/off configuration
- Constant switching frequency
- Output voltage adjustment
- Size: 58.4 x 22.9 x 8.8 mm



Product family	iEA	PAE	PAE
Output power W	30 - 78	36 - 100	50
Number of outputs	1	1	1
Output voltages V	1.2 - 28	1.8 - 5	5 - 6
Output currents A	6.5 - 25	10 - 30	8.4 - 10
Input voltage V	36 - 75	36 - 75	18 - 36
Format	Eighth brick open frame	Eighth brick open frame	Eighth brick open frame

DC-DC Converters

Quarter Brick

iQB / PAQ Series – Single Output 25A/150W

- Most cost effective single output Quarter Brick
- Standard Single Output Quarter Brick Footprint
- High efficiency – greater than 90%
- Low Profile, 8.81mm (0.347")
- Choice of remote on/off configuration
- Industry standard output voltage adjustment
- Constant switching frequency
- Size: 57.9 x 36.8 x 8.81mm

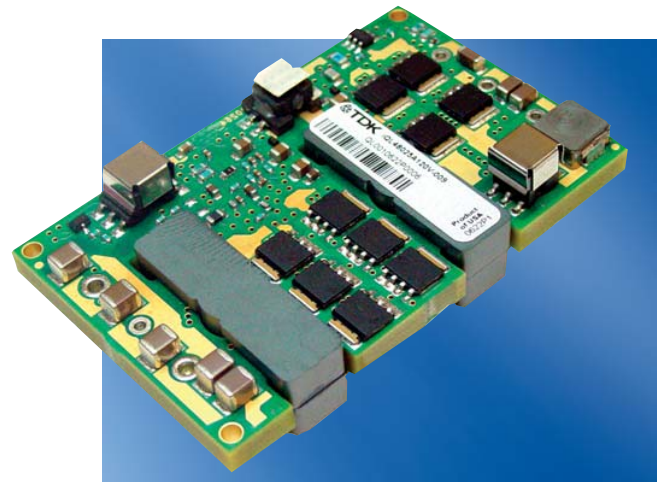


Product family	iQB	iQB	PAQ
Output power W	27 - 150	50	50 - 100
Number of outputs	1	1	1
Output voltage V	1.2 - 12	3.3	1.2 - 5
Output current A	8 - 25	15	10 - 25
Input voltage V	36 - 75	18 - 36	36 - 75
Format	Quarter brick open frame	Quarter brick open frame	Quarter brick open frame

Quarter Brick

iQE Series – Single Output, 40A/204W

- Standard Quarter Brick Footprint
- High efficiency – up to 94%
- 1500Vdc isolation
- Constant switching frequency
- Industry standard output voltage trim
- Remote on/off configuration
- Remote sense
- Tim pin
- Remote on/off configuration
- Auto-recovering output voltage / over current protection
- ISO9000 certified manufacturing facilities
- Size: 57.9 x 36.8 x 10.41mm



Product family	iQE	iQE	iQE4W
Output power W	96 - 120	96 - 150	66
Number of outputs	1	1	1
Output voltage V	3.3 - 15	3.3 - 15	3.3
Output current A	7 - 24	7 - 30	20
Input voltage V	18 - 36	36 - 75	18 - 75
Height mm	10.41	10.41	10.41
Format	Quarter brick open frame	Quarter brick open frame	Quarter brick open frame

DC-DC Converters

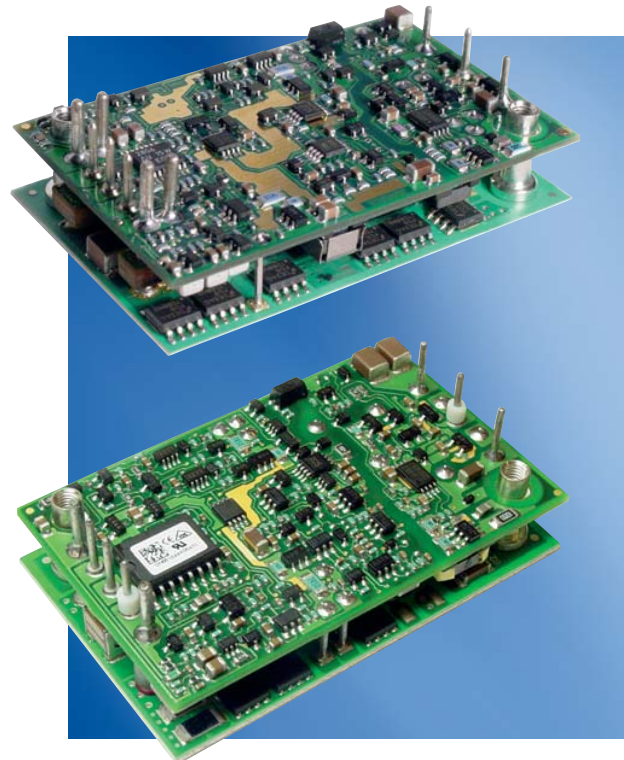
Quarter Brick

iQX Series – Single and Dual Output, Baseplate cooled

- Standard Quarter Brick format add (iQP Double Pin)
- High efficiency – up to 94%
- Very high power in high ambient temperature, low airflow environments
- Wide output voltage trim range
- Industry standard output voltage trim
- Choice of remote on/off configuration
- Size: 57.9 x 36.8 x 12.7mm

iQN Series

- Constant current limit
- "droop" share load



Product family	iQA	iQN	iQM	iQP
Output power W	96 - 120	196 - 210	72 - 204	120 - 300
Number of outputs	2	1	1	1
Output voltage V	2 * 1.5 - 5	17 - 35	1.2 - 12	1.2 - 12
Output current A	2 * 15	6 - 7	17 - 70	25 - 100
Input voltage V	36 - 75	36 - 75	36 - 75	36 - 75
Format	Quarter brick with baseplate	Quarter brick with baseplate	Quarter brick with baseplate	Quarter brick with baseplate

DC-DC Converters

Half Brick

Half-Brick and Full-Brick Power Modules for conduction cooling via baseplate. Leading power density provides output power up to 450 watt in half-brick size and up to 700 watt in full brick size.

Wide baseplate temperature range from -40°C up to $+100^{\circ}\text{C}$ for all kind of applications.

iHA / PAH Series – Single and Dual Output

- Wide output trim voltage
- Full line offering on all output voltage
- Complete offering for intermediate bus: 12V, 5V and 3.3V
- Monotonic start-up
- High reliability
- Baseplate for improved thermal management
- Size: 61.0 x 57.9 x 12.7mm



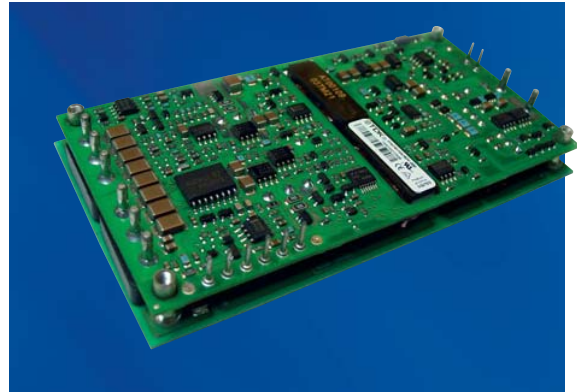
Product family	iHA	iHA	PAH	PAH	PAHD	PAHD
Output power W	72 - 450	225	50 to 450	300 - 350	75	75
Number of outputs	1	1	1	1	2	2
Output voltage V	1.2 - 28	28	2.5 - 48	12 - 28	2 * 1.8 - 3.3	2 * 2.5 - 3.3
Output current A	11 - 60	8	2.1 - 35	12.5 - 25	2 * 15	2 * 15
Input voltage V	36 - 75	18 - 36	36 - 75	18 - 36	36 - 75	18 - 36
Format	Half brick	Half brick	Half brick	Half brick	Half brick	Half brick

DC-DC Converters

Full Brick

iFA / PAF Series – Single Output 58.5A/700W

- Industry Standard 600W Full Brick
- High power density > 126W / inch³
- High efficiency: up to 93.5%
- Up to 700W of output power in high ambient temperature with air flow
- Complete line offering for Wireless applications
- Wide output trim voltage
- Optional single wire load share
- Optional power good indication
- Size: 116.8 x 61.0 x 12.7mm



Product family	iFA	iFA	PAF
Output power W	500 - 700	420 - 602	700
Number of outputs	1	1	1
Output voltage V	12 - 30	28	12 - 28
Output current A	18 - 50	15 - 21.5	25 - 58.5
Input voltage V	36 - 75	18 - 36	36 - 75
Format	Full brick with baseplate	Full brick with baseplate	Full brick with baseplate

Front End Modules

PFE Series

The 'Full Brick' AC-DC modules compliment the TDK range of brick modules, by providing an AC-DC front end, suitable for powering the DC-DC products to construct a complete Power Supply. Requiring only minimal additional components, these converters can be rapidly combined to create a full-custom design.

The PFE500 models provide a single DC output or can be combined with DCDC converters for multiple output solutions.

The PFE700 module provides a nominal, semiregulated DC output suitable for driving DCDC converters in Bus architecture.



Product family	PFE500	PFE500	PFE500	PFE700
Output power W	396	504	504	714
Number of outputs	1	1	1	1
Output voltage V	12	28	48	51 (SR)
Output current A	33	18	10.5	14
Input voltage V	85 - 265AC	85 - 265AC	85 - 265AC	85 - 265AC
Format	Full brick with baseplate	Full brick with baseplate	Full brick with baseplate	Full brick with baseplate

Power Modules

These modules comprise the basic element for developing customised power supplies. The modules include all main functions for a fast and reliable design.

PH Series

The broadest range of power modules for customised power supplies. 4 wide input voltage ranges from 18 – 400 VDC makes it simple to build a customised power supply based on standard modules for nearly every kind of application.

The PH-series are offered as “full function modules” with signaling and parallel operation function with a very wide output voltage adjustment range from –60% up to +20% of the nominal output voltage. The “simple” function modules offer a output voltage adjustment range $\pm 20\%$ in a more compact format.



Product family	PH-(F)	PH (S)
Output power W	75 - 300	50 - 600
Number of outputs	1	1
Output voltage	2 -28	3.3 - 48
Input voltage	24, 48, 110, 280	24, 48, 110, 280
Format	Brick with baseplate	Brick with baseplate

PF Series

This power factor modules offers a easy solution to connect the PH-series with 280VDC input to AC-mains with wide range input. The modules achive a power factor of 0,95 and fit together with the PH-modules.

The PF500A-360 delivers 500 watt output power at wide range input and up to 750W output power at high line input.

The PF1000A-360 offers 1000 watt output power at wide range input and 1500 watt at high line.



Product family	PF500	PF1000
Output power W	500 - 750	1000 - 1500
Number of outputs	1	1
Output voltage V	360	360
Input voltage V	85 - 265AC	85 - 265AC
Format	Brick with baseplate	Brick with baseplate

Value Added

Our Value Added capabilities bring a further significant contribution by providing non standard power solutions where 'of the shelf' product is not available.

The capability spans from complete custom design, development and supply, to taking standard products and modifying, adapting or integrating them into a complete product to meet your specific needs.



A 580 watt AC-DC power supply with 4 outputs, N+1 redundancy and hot swap capability.

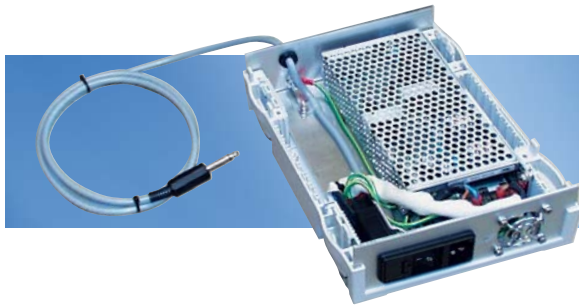


A 550 watt power supply with 10 outputs.

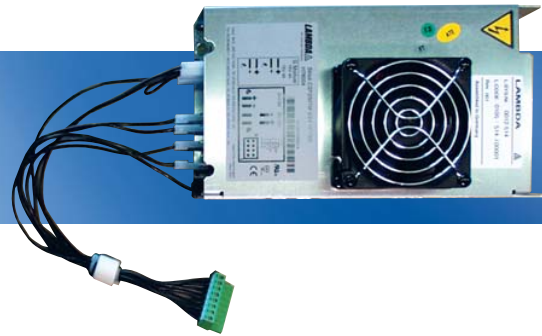


18 A 48 volt 750 watt rectifier power supply with N+1 redundancy and hot swap capability.

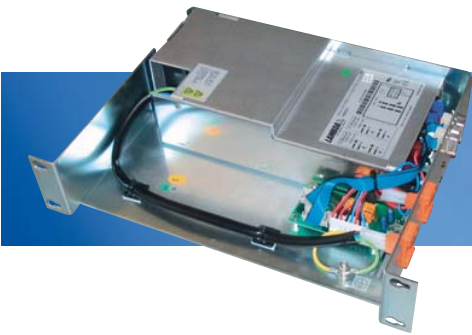
Value Added



50 watt single output power supply with special cable assembly.



250 watt multiple output power supply with integral cooling and wiring loom.



A 350 watt rack mounted multiple output unit with integral cooling and wiring loom.

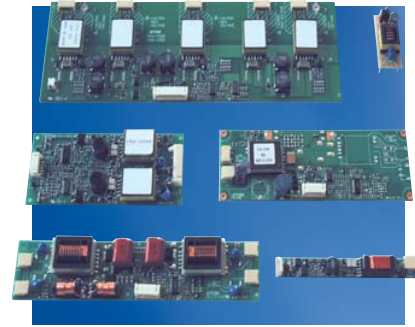


A high power multiple output power supply with integral cooling and wiring loom.

DC-AC Inverters

CXA Series Inverters for LCD Backlight Applications

Designed for driving cold cathode fluorescent lamps (CCFL) in industrial and consumer applications. The extensive range includes single and multiple output types both with or without dimming control.



Multiple Lamp Dimming Inverters

Inverter Part #	Input Volts	Lamps #	Input Connector			Output Connector			Lamp Current		Temp. Range		Output Power
			Type	Part #	Mating #	Type	Part #	Mating #	Min.	Max.	Min.	Max.	
CXA-0283	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	2 x SM02B-BHSS-1-TB 2 x SM02(4.0)B-BHS-1-TB	2 x BHSR-03VS-1 2 x BHR-02VS-1	1.80	5.50	0	60	14.52
CXA-0286	12	3	JST	S7B-PH-SM4-TB	PHR-7	JST	SM02B-BHSS-1-TB	HSR-02VS-10	2.00	6.00	0	60	14.85
CXA-0315	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	2 x SM02B-BHSS-1-TB 2 x SM02(4.0)B-BHS-1-TB	2 x BHSR-03VS-1 2 x BHR-02VS-1	3.00	7.50	0	60	21.00
CXA-0317	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	2.50	7.00	0	60	18.48
CXA-0346	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	2.50	7.00	0	60	21.56
CXA-0349	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	SM02B-BHSS-1-TB	BHR-02VS-1	1.70	6.90	-10	70	17.94
CXA-0379	12	6	HRS Molex	DF3-8P-2H IL-Z-9PL-SMTY-E1500	TBA	JST	SM02B-BHSS-1-TB	BHR-02VS-1	2.00	6.50	0	60	30.81
CXA-0385	12	4	JST	S7B-PH-SM3	PHR-7	JST	SM02B-BHSS-1 SM02(4.0)B-BHS-1	BHSR-02VS-1 BHR-02VS-1	2.30	6.50	0	70	15.60
CXA-0392	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	SM02B-BHSS-1-TB	BHSR-02VS-1	2.50	7.00	0	60	16.00
CXA-0442	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	2.30	6.00	0	70	14.88
CXA-0453	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	2.00	6.00	-20	70	12.96
CXA-0458	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	SM02B-BHSS-1-TB	BHSR-02VS-1	1.00	6 or 7	-10	70	16.80
CXA-0488	12	4	JST	S7B-PH-SM4-TB	PHR-7	JST	SM02B-BHSS-1-TB	BHSR-02VS-1	2.50	6.50	-10	60	18.46

Dual Lamp Dimming Inverters

Inverter Part #	Input Volts	Lamps #	Input Connector			Output Connector			Lamp Current		Temp. Range		Output Power
			Type	Part #	Mating #	Type	Part #	Mating #	Min.	Max.	Min.	Max.	
CXA-0214	12	2	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	1.70	6.00	-10	70	5.04
CXA-0217	12	2	JST	S5B-PH-SM3	PHR-5	JST	SM02(8.0)B-BHS-1	BHR-03VS-1	1.65	6.00	0	70	7.92
CXA-0227	12	2	JST	S5B-PH-SM3	PHR-5	JST	SM02(8.0)B-BHS-1	BHR-03VS-1	1.65	6.00	0	70	7.92
CXA-0231	12	2	JST	S5B-PH-SM3	PHR-5	JST	SM02(8.0)B-BHS-1	BHR-03VS-1	0.40	6.00	0	70	8.04
CXA-0271	12	2	JST	S5B-PH-SM3	PHR-5	JST	SM02(8.0)B-BHS-1	BHR-03VS-1	1.20	6.00	0	60	5.52
CXA-0307	12	2	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1	BHR-03VS-1	1.80	6.00	0	70	4.80
CXA-0308	12	2	Molex	53261-0890	51021-0800	JST	SM03(8.0)B-BHS-1	BHR-03VS-1	1.20	5.00	-10	70	6.00
CXA-0308A	12	2	Molex	53261-0571	51021-0800	JST	SM03(8.0)B-BHS-1	BHR-03VS-1	1.30	5.00	-10	70	6.00
CXA-0320	12	2	Molex	53261-0890	51021-0800	JST	SM02(8.0)B-BHS-1	BHR-03VS-1	1.70	5.00	-10	70	3.40
CXA-0321	5	2	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	2.40	5.00	-10	70	4.00
CXA-0326	12	2	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	2.10	5.50	-10	70	4.40
CXA-0338	12	2	Molex	53261-0871	51021-0800	JST	SM03(4.0)B-BHS-1-TB	TBA	1.00	5.00	-10	70	6.00
CXA-0356	5	2	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	2.40	6.00	0	60	6.00
CXA-0359	12	2	Molex	53261-0971	51021-0900	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	2.60	7.00	-10	70	8.40
CXA-0362	12	2	JST	S5B-PH-SM3	PHR-5	JST	SM02B-BHSS-1-TB	BHSR-02VS-1	2.00	4.50	0	60	9.00
CXA-0368	12	2	Molex	53261-0871	51021-0800	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	1.50	6.00	-10	65	7.20
CXA-0377	12	2	Molex	S7B-PH-SM3	PHR-7	JST	SM02B-BHSS-1	BHSR-02VS-1	1.50	4.50	0	70	9.00
CXA-0377C	12	2	Molex	S7B-PH-SM3	PHR-7	JST	SM02B-BHSS-1	BHSR-02VS-1	1.50	4.50	0	70	9.00
CXA-0380	5	2	JST	S5B-PH-SM4-TB	PHR-5	JST	SM02B-BHSS-1-TB	BHR-02VS-1	1.00	6.20	0	70	4.96
CXA-0384	12	2	JST	S7B-PH-SM3	PHR-7	JST	SM02B-BHSS-1 SM02(4.0)B-BHS-1	BHSR-02VS-1 BHR-02VS-1	2.30	6.50	0	70	7.80
CXA-0393	12	2	Molex	53261-0771	51021-0700	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	1.55	6.00	-10	70	5.40
CXA-0395	12	2	Molex	53261-0871	51021-0800	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	1.80	6.00	0	60	7.20
CXA-0406	5	2	Molex	53261-0771	51021-0700	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	2.70	6.40	-10	70	4.35
CXA-0437**	12	2	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	2.60	5.00	-10	75	4.50

CXA-0441**	5	2	Molex	53261-0871	51021-0800	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	2.10	5.00	-10	75	4.50
CXA-0447**	12	2	Molex	53261-0771	51021-0700	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	2.10	5.00	-10	70	6.00
CXA-0454*	12	2	Molex	53261-0771	51021-0700	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	2.00	6.00	-30	80	7.20
CXA-0457	12	2	JST	S5B-PH-SM4-TB	PHR-5	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	3.00	6.50	-20	70	6.11
CXA-0462*	12	2	Molex	53261-0871	51021-0800	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	1.50	5.00	-30	80	3.70
CXA-0463*	12	2	Molex	53261-0871	51021-0800	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	1.80	6.00	-30	80	4.44
CXA-0474**	12	2	Molex	53261-0871	51021-0800	JST	SM03(7-D1)B-BHS-1-TB	BHR-04VS-1	1.50	5.00	-10	70	6.00
CXA-P1212B-WJL	12	2	Molex	53261-0771	51021-0700	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	1.10	6.00	-10	70	7.20
CXA-P1212C-WJL	12	2	Molex	53261-0790	51021-0700	JST	SM03(7-D1)B-BHS-1-TB(LF)(SN)	BHR-04VS-1	1.10	6.00	-10	70	7.20
CXA-P1612-VJL	12	2	JST	S5B-PH-SM3	PHR-5	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	3.50	8.00	0	60	8.96

*Designed for Sharp "Strong 2" extended temperature range LCD

**Designed for NEC extended temperature range LCD

Single Lamp Dimming Inverters

Inverter Part #	Input Volts	Lamps #	Input Connector			Output Connector			Lamp Current Min.	Lamp Current Max.	Temp. Range		Output Power
			Type	Part #	Mating #	Type	Part #	Mating #			Min.	Max.	
CXA-0319	5	1	Molex	53261-0571	51021-0500	JST	SM02B-BHSS-1	BHSR-02VS-1	2.40	6.00	0	60	3.60
CXA-0341	5	1	SMK	CHP2705-0101	CHP1105-0101	JST	SM02B-BHSS-1	BHSR-02VS-1	1.00	2.00	0	50	0.64
CXA-0345	12	1	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	1.00	8.00	-30	85	5.60
CXA-0390	12	1	Molex	53261-0571	51021-0500	JST	SM02B-BHSS-1-TB	BHSR-02VS-1	1.50	6.75	0	70	4.05
CXA-0411	5	1	JST	SM07B-SRSS-TB	TBA	JST	SM02B-BHSS-1-TB	BHR-02VS-1	1.90	6.00	0	60	3.96
CXA-0435	12	1	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	1.80	6.50	-20	70	3.38
CXA-0461*	12	1	Molex	53261-0871	51021-0800	JST	SM03(8.0)B-BHS-1	BHR-03VS-1	1.50	5.00	-30	80	3.00
CXA-0477*	5	1	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	1.10	6.00	-30	80	3.60
CXA-0489**	12	1	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	2.40	6.00	-20	75	1.74
CXA-0490	12	1	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	2.50	6.00	-20	80	4.32
CXA-0492*	12	1	Molex	53261-0871	51021-0800	JST	SM02(8.0)B-BHS-1-TB	BHR-03VS-1	1.60	6.00	-30	80	5.07
CXA-2081	12	1	Molex	53261-0510	51021-0500	JST	BHSR-02VS-1	BHR-04VS-1	1.00	3.50	0	50	1.75
CXA-L0605A-VJL	5	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	3.000	6.000	0	60	3.60
CXA-L0605-VJL	5	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	3.000	6.000	0	60	3.60
CXA-L0605-VSL	5	1	Molex	53261-0571	51021-0500	JST	SM02B-BHSS-1-TB	BHSR-02VS-1	3.000	6.000	0	60	3.60
CXA-L0612A-VJL	12	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	1.600	6.000	0	60	3.60
CXA-L0612A-VJR	12	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	1.600	6.000	0	60	3.60
CXA-L0612A-VSL	12	1	Molex	53261-0571	51021-0500	JST	SM02B-BHSS-1-TB	BHSR-02VS-1	1.600	6.000	0	60	3.60
CXA-L0624-VJL	24	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	1.600	6.000	0	60	3.60
CXA-L0712-VJL	12	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	2.000	7.000	0	60	4.20

*Designed for Sharp "Strong 2" extended temperature range LCD

**Designed for NEC extended temperature range LCD

PCB Mounting Inverters

Inverter Part #	Input Volts	Lamps #	Connectors						Lamp Current	Temp. Range		Output Power
CXA-L10A	5	1 or 2	PCB Mounting Type						5.00	-10	60	4.50
CXA-L10L	12	1 or 2	PCB Mounting Type						5.00	-10	60	4.50
CXA-M10A	5	1 or 2	PCB Mounting Type						5.00	-10	60	6.00
CXA-M10L	12	1 or 2	PCB Mounting Type						5.00	-10	60	6.00
CXA-M10M	24	1 or 2	PCB Mounting Type						5.00	-10	60	6.00
CXA-P10A	5	1 or 2	PCB Mounting Type						5.00	-10	60	9.00
CXA-P10L	12	1 or 2	PCB Mounting Type						5.00	-10	60	9.00
CXA-P10M	24	1 or 2	PCB Mounting Type						5.00	-10	60	9.00
CXA-P20L	12	1 or 2	PCB Mounting Type						10.00	-10	60	9.00

Non Dimming Inverters

Inverter Part #	Input Volts	Lamps #	Input Connector			Output Connector			Output Current	Temp. Range		Output Power
			Type	Part #	Mating #	Type	Part #	Mating #		Min.	Max.	
CXA-0493	12	2	Molex	53261-0871	51021-0800	JST	SM03(4.0)B-BHS-1-TB	TBA	5.00	-10	70	6.00
CXA-L0505-NJL	5	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	5.00	0	60	3.00
CXA-L0512-NJL	12	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	5.00	0	60	3.00
CXA-L0524-NJL	24	1	Molex	53261-0571	51021-0500	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	5.00	0	60	3.00
CXA-P1012-NJL	12	2	JST	S5B-PH-SM3	PHR-5	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	5.00	-10	60	6.00
CXA-P1024-NJL	24	2	JST	S5B-PH-SM3	PHR-5	JST	SM02(8.0)B-BHS-1-TB(LF)(SN)	BHR-03VS-1	5.00	-10	60	6.00



The latest product range and detailed product information
can be found on our Website:

www.tdk-components.eu/powersupplies

© by TDK Electronics Europe GmbH, 05-2007

TDK Electronics Europe GmbH, Wanheimer Straße 57, D-40472 Düsseldorf, Germany

Tel: +49-(0)211-90770, Fax: +49-(0)211-414984, E-Mail: info@tdk.de

www.tdk-components.eu

