



IEXT

- Designed for industrial use
- Full galvanic isolation (input/output/earth)
- Output over voltage protection (IEXT)
- High efficiency switch mode design
- Input transient/surge suppression (IEXTMV-suitable for forkhoist use, specify option -F)
- Constant current limit for charging (IEXT)
- Optional output decoupling diode for parallel redundancy
- Short circuit protection
- Reverse polarity protection
- External trim pot for output voltage adjustment
- Complies with EMI standards CISPR22:1985 & AS/NZS3548:1992

◆ 24 Month Warranty

SPECIFICATIONS All specifications are typical at nominal input, full load and at 20°C unless otherwise stated.

ELECTRICAL

DC Input	<ul style="list-style-type: none"> • LV: 10-16V • MV: 21-60V • HV: 60-132V • Please note that for higher power output, our SR250 –750A range is suitable for 110-375VDC input
Protection - input	All models: Input fuse
• output	IEXT: <i>Overload:</i> constant current limit <i>Short circuit:</i> shutdown to zero output (reset by power off) IEHR: Hiccup current limit on overload or short circuit
Reverse Polarity	Input Reverse Polarity protection by diode which opens fuse
Transient Protection	Varistor across input to limit supply transients (voltage spikes)
Isolation	≥ 1KV DC input / output ≥ 1KV DC input / output to ground
Efficiency	80-85% (model dependent)
Overvoltage Protection (IEXT only)	Operates at 25% above nominal output voltage (converter shuts down - reset by power off)
Soft Start	1 second typical
Output Power	IEXT: 70W continuous IEHR: 150W continuous
Output Voltages	Refer to model table - other voltages available, please ask our sales staff
Voltage Adj. Range	Approx. ±10%, refer to model table
Line Regulation	< 0.5% over input range
Load Regulation	< 0.7% open circuit to full load
Ripple	Typically 1% Peak-Peak
Noise	To CISPR22
Operating	0 to 40°C; linearly derate to 50% output at 50°C

PHYSICAL

Connections - In/Out	IEXT: Plug-in screw terminal block IEHR: 'Barrier' type screw terminal
Enclosure	Base: anodised aluminium Cover: black powder coated mild steel
Indicators	Green LED for Power On
Weight	IEXT: 450g IEHR: 1.25Kg
Mounting	IEXT: M5 Ø holes 164 x 46 mm, and/or: M3 threaded inserts 164 x 66 mm IEHR: To flat surface with brackets supplied, M4 Ø holes. Side mounting centres 140 x 78 mm, End mounting centres 216 x 78 mm

OPTIONS

Parallel Redundancy	Output decoupling diode plus DC OK alarm (Relay contacts rated 1A, 50VDC/32VAC) Add suffix - P
Rack mount	Converter fitted into 19" x 2U subrack Add : +RM2U For rack mount with parallel redundancy Add: +P2UXT or +P2UHR
DIN Rail Mount	IEXT only: Add: DINKIT
Fork Hoist Use	IEXT/MV- versions may be used on electric forkhoists, specify option -F
Low Temperature	Operation to -20°C, specify option -LT



IEXTD/LV-5/12

70-150W DC-DC Converter

IEXT & IEHR

IEXT - SINGLE OUTPUT (70W)				
	DC Input	DC Output		
MODELS	Voltage Range	Voltage * ¹	Amps	Voltage Range
IEXT/LV-12	11-16	13.8	5.0	11 - 14
IEXT/LV-24	11-16	24	2.9	22-28
IEXT/LV-48	11-16	48	1.5	43-55.2
IEXT/MV-08	21 - 60	8	6.5	7 - 9.5
IEXT/MV-12	21 - 60	13.8	5.0	11 - 14
IEXT/MV-18	21 - 60	18.5	3.8	16.6 - 20.3
IEXT/MV-24	21 - 60	24	3.0	22-28
IEXT/MV-48	21 - 60	48	1.5	43-55.2
IEXT/HV-12	60 - 132	13.8	5.0	11-14
IEXT/HV-24	60 - 132	24	3.0	22-28
IEXT/HV-48	60 - 132	48	1.5	43-55.2

Dimensions: IEXT
180L x 76W x 35H

STANDARD MODEL TABLE - IEHR (150 Watt)				
	DC Input	DC Output		
MODELS	Voltage Range	Voltage * ¹	Amps	Voltage Range
IEHR/LV-12	10.5-16	13.8	11.2	11-14
IEHR/LV-24	10.5-16	24	6.2	22-28
IEHR/LV-36	10.5-16	36	4.2	32-41.4
IEHR/LV-48	10.5-16	48	3.2	43-55.2
IEHR/MV-09	21-60	9	16	8-10
IEHR/MV-12	21-60	13.8	11.2	11-14
IEHR/MV-19	21-60	19	7.9	17-21
IEHR/MV-21	21-60	21	7	19-23
IEHR/MV-24	21-60	24	6.2	22-28
IEHR/MV-36	21-60	36	4	32-41
IEHR/MV-48	21-60	48	3.2	43-55.2
IEHR/HV-12	60 - 132	13.8	11.2	11-14
IEHR/HV-24	60 - 132	24	6.2	22-28
IEHR/HV-36	60 - 132	36	4.2	32-41.4
IEHR/HV-48	60 - 132	48	3.2	43-55.2



Dimensions: IEHR
207L x 130W x 60H

IEXTD - DUAL OUTPUT				
MODEL	V Input	Voutput	I output	Power (W)
IEXTD/LV-5/12 *	9.4 - 18	5 12	5 1.15	25 13.8

* Please call Innovative Ener-
gies for full specifications as
data varies from IEXT single
output model.

NOTES

*1 Factory set output unless otherwise requested. Other output voltages available on request - please contact us with your requirements.

2. Battery Charging:

The IEXT (SINGLE OUTPUT) has a constant output current limit and is suitable for battery charging.

The IEHR does not have a constant current limit but in practice it may still be used for float charging lead acid batteries provided the batteries are not deep discharged.