

User Manual

IENT / IEHR 70- 150 Watt DC-DC Converter



Z367

***See back page for customised models**



- Isolated input- output - chassis
- Designed for industrial use
- Output over voltage protection (IEXT)
- Constant current limit for charging (IEXT)
- Input transient/surge suppression
- Short circuit protection
- Reverse polarity protection
- External trim pot for output voltage adjustment
- Output decoupling diode and dc fail alarm standard

◆ 24 Month Warranty

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

ELECTRICAL		PHYSICAL	
DC Input (nominal)	12, 24, 36, 48, 110V	Connections - In/Out	IEXT: Plug-in screw terminal block IEHR: 'Barrier' type screw terminal
Protection - input	All models: Input fuse	Enclosure	Base: anodised aluminium Cover: black powder coated mild steel
• output	IEXT: <i>Overload</i> : constant current limit <i>Severe overload</i> : shuts down when output < 5V, power off to reset IEHR: Hiccup mode current limit	Indicators	Green LED for Power On
Reverse Polarity	IEXT/LV & IEHR: input fuse IEXT/MV & IEXT/HV: not polarity sensitive	Weight	IEXT: 450g IEHR: 1.25Kg
Transient Protection	Input varistor	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
Isolation	1KV DC input - output - chassis	OPTIONS	
Efficiency	LV: 72-80%, MV/24/48: 80-87%, HV: 85-87%	Rack mount	Converter fitted into 19" x 2U subrack Add : +RM2U plus +REARHR6.1
Overvoltage Protection (IEXT only)	Operates at 25% above nominal output voltage (converter shuts down - reset by power off)	DIN Rail Mount	Using DIN rail clips, code DINKIT
Soft Start	1 second typical	Fork Hoist Use	Add option: +FORKHOIST , refer to page 4 for common models.
Output Power	IEXT: 70W continuous IEHR: 150W continuous	Low Temperature	Operation to -20°C, add suffix -LT
Output Voltages	Refer to model table - other voltages available, please ask our sales staff	Conformal Coating	For harsh environments, add option: +CONFORMAL COATING
Voltage Adj. Range	Approx. ±10%, refer to model table	Battery Charging	The IEXT has a constant output current limit and is suitable for battery charging. * Please specify output voltage on ordering The IEHR does not have a constant current limit but may be used for battery charging for some applications.
Line Regulation	< 0.5% over input range	Undervoltage lockout	Available on IEXT/LV models, Lockout at 10.2V, auto reset at 12.4V, add suffix -UV
Load Regulation	< 0.7% open circuit to full load	Use with laptops	Some laptops require a 'SENSE' terminal - the diode is replaced with a resistor and the D+ terminal becomes the "SENSE" terminal.
Ripple	Typically 1% Peak-Peak		
EMC	To CISPR22:1985		
Operating Temperature	0 to 40°C; linearly derate to 50% output at 50°C		
Alarm contacts	Changeover, 1A 30VDC		

70-150W Isolated DC-DC Converter

IEXT & IEHR

STANDARD MODEL TABLE - IEXT - 70 Watt

MODELS*1	DC Input	DC Output*4		
	Voltage Range	Voltage*3	Amps	Voltage Range
IEXT/LV-05P*2	11-16	5	10	4.5 - 5.5
IEXT/LV-12P	11-16	13.8	5.0	11 - 14
IEXT/LV-18P	11-16	18	3.8	16 - 20
IEXT/LV-24P	11-16	24	2.9	22-28
IEXT/LV-48P	11-16	48	1.5	43-55.2
IEXT/MV-12P	21 - 60	13.8	5.0	11 - 14
IEXT/MV-18P	21 - 60	18	3.8	16.6 - 20.3
IEXT/MV-24P	21 - 60	24	3.0	22-28
IEXT/MV-48P	21 - 60	48	1.5	43-55.2
IEXT/HV-12P	60 - 132	13.8	5.0	11-14
IEXT/HV-24P	60 - 132	24	3.0	22-28
IEXT/HV-48P	60 - 132	48	1.5	43-55.2

*1 Model codes without the -P suffix do not have diode and alarm relay fitted

*2 No overvoltage protection

*3 Refer to terminal connections below. Output voltage is set at +D output except for 12V models where the '+' output is set to 13.8V

*4 Custom output voltages available

STANDARD MODEL TABLE - IEHR - 150 Watt

MODELS*1	DC Input	DC Output*4		
	Voltage Range	Voltage*3	Amps	Voltage Range
IEHR/LV-12P	10.5-16	13.8	11.2	11-14
IEHR/LV-24P	10.5-16	24	6.2	22-28
IEHR/LV-36P	10.5-16	36	4.2	32-41.4
IEHR/LV-48P	10.5-16	48	3.2	43-55.2
IEHR/24-12P	21-40	13.8	11.2	11-14
IEHR/24-24P	21-40	24	6.2	22-28
IEHR/24-36P	21-40	36	4	32-41
IEHR/24-48P	21-40	48	3.2	43-55.2
IEHR/48-12P	40-60	13.8	11.2	11-14
IEHR/48-24P	40-60	24	6.2	22-28
IEHR/48-36P	40-60	36	4	32-41
IEHR/48-48	40-60	48	3.2	43-55.2
IEHR/HV-12P	60 - 132	13.8	11.2	11-14
IEHR/HV-24P	60 - 132	24	6.2	22-28
IEHR/HV-36P	60 - 132	36	4.2	32-41.4
IEHR/HV-48P	60 - 132	48	3.2	43-55.2



Dimensions: IEXT
180L x 82W x 37H



Dimensions: IEHR
207L x 130W x 60H

TERMINAL LAYOUTS



