enerstone

EVER Technology

The patented *EVER* technology (Electronic system for Variable Energy Redistribution) integrates on a single chip all the power components needed for high energy active balancing.

SHIFT TO ACTIVE

With a footprint reduced by 30%, active balancing is now within the reach of your application.

CONSIDER MAINTENANCE

With the integrated diagnostic system, identify and replace only defective cells throughout the life cycle of your product.

APPLICATIONS

The expandable BMS module is appropriate for a wide range of applications powered by Li+ battery. From electrical vehicles to emergency power units and battery pack integrators, the ENERSTONE solutions meet the most demanding needs.

BATTERY CHARGER

Parameter	Value
Input voltage	90 to 305VAC / Efficiency above 92%
Output	12 to 54VDC / 4,4A to 16A
Working T°	-40 to 70°C

Dimension	244.2*68*38.8mm
Packing	1.3Kgs

MODEL	HLG-240H-15	HLG-240H-20	HLG-240H-30	HLG-240H-42	HLG-240H-54
Model	Esource 4S - F 15A	Esource 4S - N 12A	Esource 6/7/8S - 8A	eSource 10S - 5,7A	eSource 13S/15S - 4,5A
DC VOLTAGE	15V	20V	30V	42V	54V
CONSTANT CURRENT REGION Note.4 6 ~12V	7.5 ~ 15V	10 ~ 20V	15 ~ 30V	21 ~ 42V	27 ~ 54V
RATED CURRENT	15A	12A	8A	5.72A	4.45A
RATED POWER	225W	240W	240W	240.24W	240.3W
RIPPLE & NOISE (max.) Note.2 150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	350mVp-p
VOLTAGE ADJ. RANGE Note.6 11.2 ~ 12.8V	14 ~ 16V	18.6 ~ 21.4V	28 ~ 32V	39 ~ 45V	50 ~ 57V

OUTPUT

Can be adjusted by internal potentiometer A type and C type only

CURRENT ADJ. RANGE

	7.5 ~ 15A	6 ~ 12A	4 ~ 8A	2.86 ~ 5.72A	2.23 ~ 4.45A
VOLTAGE TOLERANCE Note.3 ±2.5%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
LOAD REGULATION	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%
SETUP, RISE TIME	Note.9 1000ms,80ms/115VAC			500ms,80ms/230VAC at full load	
HOLD UP TIME (Typ.)	15ms at full load	230VAC /115VAC			
VOLTAGE RANGE	Note.5 90 ~ 305VAC	127 ~ 431VDC			
FREQUENCY RANGE	47 ~ 63Hz				

POWER FACTOR (Typ.) PF>0.98/115VAC, PF>0.95/230VAC at full load (Please refer to "Power Factor Characteristic" curve) **TOTAL HARMONIC DISTORTION** THD< 20% when output loading 50%

INPUT

EFFICIENCY (Typ.)	0,9 91.5%	92.5%	92.5%	93.5%
AC CURRENT (Typ.)	1.2A / 277VAC			

INRUSH CURRENT (Typ.) COLD START 75A(twidth=570 s measured at 50% Ipeak) at 230VAC$_\mu$ **LEAKAGE CURRENT** <0.75mA / 277VAC

	95 ~ 108%	95 ~ 108%	95 ~ 108%	95 ~ 108%	95 ~ 108%	95 ~ 108%

OVER CURRENT

Protection type : Constant current limiting, recovers automatically after fault condition is removed

SHORT CIRCUIT

Hiccup mode, recovers automatically after fault condition is removed

PROTECTION

	17.5 ~ 21.5V	23.5 ~ 27.5V	33 ~ 39V	48 ~ 54V	60 ~ 67V

OVER VOLTAGE

Protection type : Shut down and latch off o/p voltage, re-power on to recover

OVER TEMPERATURE

WORKING TEMP.

WORKING HUMIDITY

ENVIRONMENT STORAGE TEMP., HUMIDITY ±0.03%/℃ (0 ~ 50℃)

VIBRATION

UL1012, CAN/CSA-C22.2 No. 107.1-01, UL8750, CSA C22.2 No. 250.0-08, TUV EN61347-1, EN61347-2-13 independent

SAFETY STANDARDS

UL60950-1, UL8750, TUV EN60950-1, IP65 or IP67, J61347-1, J61347-2-13 approved