

# MERLIN BATTERY CHARGERS

Merlin Smart Battery Chargers offers fully automatic, multi-stage battery charging, with the ability to charge three separate battery banks. The ultimate set-and-forget charger, these products incorporate special charging algorithms designed to quickly and accurately recharge and maximize the life of AGM, Gel, Flooded or Lithium batteries. These chargers will also charge multiple battery chemistries simultaneously.

Merlin Smart Battery Chargers are fully adaptive 4 stage chargers. High quality internal electronics give one of the lowest AC ripple outputs in the industry.

Each output can be:

- set for normal, simultaneous, or priority charging,
- set for a different battery chemistry (lead/acid, Gel, AGM, or lithium-ion),
- current and voltage limited,
- set independently for temperature, making them perfect for charging either multiple batteries that differ greatly in size or chemistry, or for Lithium Ion Cells.

- **Fully adaptive charging** that ensures perfectly accurate charging of each connected battery bank and no overcharging.
- **Universal input** that operates on any voltage of 90-256 VAC 47-62Hz, anywhere in the World, or from poor quality AC supplies.
- **Battery equalise mode** is a specially selectable mode for recovering and reconditioning 'dead' batteries.
- **Quiet mode** reduces the fan speed to quiet running for night-time use when mounted near sleeping areas.
- **Advanced protection** from reverse polarity, overcharge, overheating, and output short circuit.
- **4 stage charging** that rapidly and safely replenishes large capacity and specialist battery types to 100% charged.



PART#	02-3020	02-3032	02-3040	02-3060	02-3100
RATING	20A, 12V	30A, 24V	40A, 12V	60A, 12V	100A, 12V
<b>DC OUTPUT</b>					
BULK/ ABSORPTION	14.2 - 15.5V	28.4 - 31.0V	14.2 - 15.5V	14.2 - 15.5V	14.2 - 15.5V
FLOAT	13.4 - 13.8V	26.8 - 27.6V	13.4 - 13.8V	13.4 - 13.8V	13.4 - 13.8V
BATTERY RECOVERY (EQUALISE)	16.0V	32.0V	16.0V	16.0V	16.0V
CHARGING CONTROLS	4 STAGE (2 SELECTABLE)	4 STAGE (2 SELECTABLE)	4 STAGE (2 SELECTABLE)	4 STAGE (2 SELECTABLE)	4 STAGE (2 SELECTABLE)
NUMBER OF OUTPUTS	3	3	3	3	3
BATTERY TYPE PROGRAMMES	LEAD/ACID, GEL, AGM, LITHIUM, CUSTOM PROGRAM	LEAD/ACID, GEL, AGM, LITHIUM, CUSTOM PROGRAM	LEAD/ACID, GEL, AGM, LITHIUM, CUSTOM PROGRAM	LEAD/ACID, GEL, AGM, LITHIUM, CUSTOM PROGRAM	LEAD/ACID, GEL, AGM, LITHIUM, CUSTOM PROGRAM
<b>AC INPUT</b>					
VOLTAGE (NOMINAL)	120, 230, 240VAC	120, 230, 240VAC	120, 230, 240VAC	120, 230, 240VAC	120, 230, 240VAC
OPERATION RANGE	90 - 265VAC	90 - 265VAC	90 - 265VAC	90 - 265VAC	90 - 265VAC
FREQUENCY RANGE	47 - 63HZ	47 - 63HZ	47 - 63HZ	47 - 63HZ	47 - 63HZ
AC POWER CONSUMPTION	350W	1050W	700W	1050W	1800W
POWER FACTOR CORRECTION	YES	YES	YES	YES	YES
<b>PROTECTION</b>					
REVERSE POLARITY	YES	YES	YES	YES	YES
COOLING	FORCED VENTILATION	FORCED VENTILATION	FORCED VENTILATION	FORCED VENTILATION	FORCED VENTILATION
OUTPUT SHORT CIRCUIT	YES	YES	YES	YES	YES
INGRESS PROTECTION	IP32	IP32	IP32	IP32	IP32
<b>DISPLAY</b>					
INDICATOR	LCD WITH BACK LIGHTING	LCD WITH BACK LIGHTING	LCD WITH BACK LIGHTING	LCD WITH BACK LIGHTING	LCD WITH BACK LIGHTING
DIGITAL DISPLAY (LED)	VOLTAGE, CURRENT, STATUS, ERROR CODE	VOLTAGE, CURRENT, STATUS, ERROR CODE	VOLTAGE, CURRENT, STATUS, ERROR CODE	VOLTAGE, CURRENT, STATUS, ERROR CODE	VOLTAGE, CURRENT, STATUS, ERROR CODE
<b>ENCLOSURE</b>					
WEIGHT (KG)	2.4	4.0	2.6	4.0	6.4
DIMENSIONS (MM)	295 X 206 X 86	356 X 206 X 97	295 X 206 X 86	356 X 206 X 86	236 X 425 X 102.7