

MEC Battery Chargers

Direct communication. Speedy prototyping. Customized for your applications since 1989.

Output Power

40 to 1,500 Watt

for LITHIUM-based Batteries









"Perseverance, paired with a forward-looking mindset, is a source of strength to make things happen."

Wilfried Steger

Founder and Managing Director



Lithium-based Battery Chargers

Output Power

40 to 1,500 Watt

Customized for your applications with configurable parameters

Product Type	Product Series	Nor f	ninal Cha or Li-ion 3.6V/Ce	rge Curre Batteries ll (nom.)	ent
		45	7S	10S	145
Convection-cooled					
	MCC-40	-	-	-	-
	NOVA-40C	3.5A	2A	-	-
	NOVA-60C	3.5A	2A	-	-
Fan-cooled					
	NOVA-150F	9A	5A	-	-
	NOVA-300F	18A	10A	7A	5A
	NOVA-360F	20A	12A	8A	6A
	NOVA-650F	-	22A	15A	11A
	NOVA-1000F	-	30A	21A	15A
	NOVA-1200F	-	40A	28A	20A
	NOVA-1500F	_	50A	35A	25A
Waterproof IP65/IP68					
	NOVA-100	7A	4A	2.5A	2A
IP65	ATLAS-300	20A	10A	7A	5A
	ATLAS-500	-	17A	11A	9A
	ATLAS-650	-	22A	15A	11A
	ATLAS-750	_	25A	17A	13A

We manufacture quality products. Wedoresponsible ODM / OEM.

Nominal Charge Current for LiFePO4 Batteries			Optional Features					
		//Cell (no						Page
4S	85	125	145	16S	CAN-Bus	Ignition Lock	Selectable Charge Profiles	
2.2A	-	-	-	-	-	-	~	04
-	-	-	-	-	-	-	-	05
-	-	-	-	-	-	-	-	06
10A	7A	-	-	-	-	-	-	08
20A	10A	7A	6A	5A	-	~	~	09
25A	12A	8A	7A	5A	-	~	~	10
-	22A	15A	13A	11A	~	~	~	11
-	30A	20A	18A	16A	~	~	~	12
-	40A	27A	24A	20A	~	~	~	13
-	50A	35A	30A	25A	~	~	~	14
7A	4A	2.5A	2.2A	2A	-	-	-	16
20A	10A	7A	6A	5A	~	~	~	17
-	17A	11A	10A	9A	~	~	~	18
-	23A	15A	13A	11A	~	~	~	19
-	25A	17A	15A	13A	~	~	~	20

Convection-cooled

Guaranteed soundless operation with no vibrations. Power efficiency is better maintained.









Convection-cooled

Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4
4S 7S 10S 14S	4S 8S 12S 14S 16S
- - -	2.2A

Power Output / Efficiency max. 32W, >89% Mains Voltage 100 - 240VAC / 50 - 60Hz Mains Pins country specific **Operating Temperature** -10°C to +40°C WxDxH / Weight 180x100x53mm / 700g Charge Cord 1.2m with 12mm charge plug cord with alligator clamps Accessories Ingress Protection Rating IP20 Agency Approval CE

Shock / Vibration-proof, Condensation-proof

Convenient daily necessity with smart LCD display

3 Charge Modes: Universal, Recovery, Maintenance

- Universal mode for charging batteries of unknown type
- Recovery mode for deep-discharged batteries
- Maintenance mode for idle storage

Battery Temperature Monitoring

Help maintain long battery life with auto charge-voltage adjustment

5 Selectable Battery Types

- GEL, AGM, WET
- LiFePO4
- Universal Mode

Motorized Sport Equipment, Winter Storage Battery Maintenance, Gardening Tools



NOVA-40C

Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4		
4S 7S 10S 14S	4S 8S 12S 14S 16S		
3.5A 2A	- - - - -		
Power Output	max. 40W		
Efficiency	>85%		
_	100 - 240VAC / 50 - 60Hz		
Mains Pins	country specific		
	40001 4000		
Operating Temperature	-10°C to +40°C		
WxDxH / Weight	65x106x46mm / 290g		
Charge Cord	1.2m, standard open ends		
	<u> </u>		
End Terminals	Ring Terminals / as per request		
Ingress Protection Rating	IP20		
Agency Approval	CE		

Handy, Portable Plug-Top Charger

Economic solution for small to medium sized batteries

Auto-Detect

Start fresh the charge cycle at certain pre-set days or voltage level

Definitely Safe

Protection against short circuit, overload, reverse polarity, over temp.

Optional Features

Customized Charge Profiles

e-Bikes, Motorbikes, Sport Gears, Gardening Tools, Farming Tools, Battery Maintenance and Assurance of Readiness



LiFePO4

Nominal Charge Current for Li-based Batteries

Li-ion

LI-IOII	LII er OT
4S 7S 10S 14S	4S 8S 12S 14S 16S
3.5A 2A - -	
Power Output	max. 60W
Efficiency	>85% @ 230VAC
Mains Voltage	100 - 240VAC / 50 - 60Hz
Mains Pins	country specific
Operating Temperature	-20°C to +40°C
WxDxH / Weight	134.5x59x33.5mm / 325g
Charge Cord	1.2m, standard open ends
End Terminals	as per request
Ingress Protection Rating	IP40
Agency Approval	CE

Handy, Portable Charger

Economic solution for small to medium sized batteries

Auto-Detect

Start fresh the charge cycle at certain pre-set days or voltage level

Definitely Safe

Protection against short circuit, overload, reverse polarity, over temp.

Optional Features

Customized Charge Profiles

e-Bikes, Motorbikes, Sport Gears, Gardening Tools, Farming Tools



Fan-cooled

Extremely quiet load-/temperature-controlled fan-cooled mechanism; making it fit for even wheelchair on charge in a calm living room.



Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4
4S 7S 10S 14S	4S 8S 12S 14S 16S
9A 5A - -	10A 7A - - -

Power Output / Efficiency	max. 150W / >87%
Mains Voltage Mains Pins	100 - 240VAC / 50 - 60Hz country specific
Operating Temperature	0°C to +40°C
WxDxH / Weight	110x180x36mm / 800g
Charge Cord	1.2m, standard open ends
End Terminals	Ring Terminals / as per request
Ingress Protection Rating	IP20
Agency Approval	CE

Ī

Lightweight yet Powerful

Weigh only at 800g, the light compact box is brimming with power (max. 150W)

Compact and Quiet

Load-controlled fan-cooled mechanism, fit for wheelchair in a quiet living room

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- Ignition Lock
- Detachable Wall-Mount Brackets

Wheelchairs, e-Bikes, Sport Gears, Motorbikes, Forklifts, Farming Tools, Boats, Yachts



NOVA-300F

Li-ion

18A | 10A | 7A | 5A

10S

End Terminals

Agency Approval

Ingress Protection Rating

14S

7S

45

Nominal Charge Current for Li-based Batteries

20A | 10A |

LiFePO4

12S

Ring Terminals / as per request

14S

16S

	2011 1011 111 111 111
Power Output / Efficiency	max. 300W / 92.5%
Mains Voltage Mains Pins	100 - 240VAC / 50 - 60Hz country specific
Operating Temperature	-20°C to +40°C
WxDxH / Weight	110x180x42mm / 800g
Charge Cord	1.2m, standard open ends

IP20

CF

Lightweight yet Powerful

Weigh only at 800g, the light compact box is brimming with power (max. 300W)

Compact and Quiet

Load-controlled fan-cooled mechanism, fit for wheelchair in a quiet living room

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- Ianition Lock
- Detachable Wall-Mount Brackets

Wheelchairs, e-Bikes, Sport Gears, Motorbikes, Caravans, Hydraulic Lifts, Farming Tools, Boats, Yachts



NOVA-360F

Fan-cooled

Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4
4S 7S 10S 14S	4S 8S 12S 14S 16S
20A 12A 8A 6A	25A 12A 8A 7A 5A

Power Output / Efficiency max. 360W / >89% Mains Voltage 100 - 240VAC / 50 - 60Hz Mains Pins country specific Operating Temperature -20°C to +40°C WxDxH / Weight 158x235x67mm / 2.3kg Charge Cord 1.2m, standard open ends **End Terminals** as per request Ingress Protection Rating IP20 Agency Approval CF

Lightweight yet Powerful

Weigh only at 2.3kg, the light compact box is brimming with power (max. 360W)

Compact and Quiet

Extremely quiet load-controlled fan-cooled mechanism; quick response to change requests

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- Ianition Lock
- Detachable Wall-Mount Brackets

Wheelchairs, e-Bikes, Sport Gears, Motorbikes, Caravans, Hydraulic Lifts, Farming Tools, Boats, Yachts



NOVA-650F

Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4
4S 7S 10S 14S	4S 8S 12S 14S 16S
- 22A 15A 11A	- 22A 15A 13A 11A

Power Output / Efficiency	max. 650W / >92%
Mains Voltage Mains Pins	100 - 240VAC / 50 - 60Hz country specific
Operating Temperature	-20°C to +40°C
WxDxH / Weight	158x235x67mm / 2.5kg
Charge Cord	standard open ends
End Terminals	as per request
Ingress Protection Rating	IP20
Agency Approval	CE

Lightweight yet Powerful

Weigh only at 2.5kg, the light compact box is brimming with power (max. 650W)

Compact and Quiet

Extremely quiet load-controlled fan-cooled mechanism; quick response to change requests

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- CAN-Bus
- Ignition Lock
- Dry Relay
- Remote Display

Motorbikes, Caravans, Hydraulic Lifts, Farming Tools, Boats, Yachts



NOVA-1000F

Li-ion

10S 14S

Fan-cooled

Nominal Charge Current for Li-based Batteries

LiFePO4

12S | 14S | 16S

- 30A 21A 15A	- 30A 20A 18A 16A
Power Output / Efficiency	max. 1,000W / >92%
Mains Voltage Mains Pins	100 - 240VAC / 50 - 60Hz country specific
Operating Temperature	-20°C to +40°C
WxDxH / Weight	180.5x238x84mm / 2.5kg
Charge Cord	standard open ends
End Terminals	as per request
Ingress Protection Rating	IP20
Agency Approval	CE

Work Horse for Large Batteries

Weigh only at 2.5kg, the light compact box is brimming with power (max. 1,000W)

Compact and Quiet

Extremely quiet load-controlled fan-cooled mechanism; quick response to change requests

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- CAN-Bus
- Ignition Lock
- Dry Relay
- Remote Display
- Detachable Brackets

Caravans, Hydraulic Lifts, Scissors Lifts, Farming Tools, Boats, Yachts



NOVA-1200F

Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4
4S 7S 10S 14S	4S 8S 12S 14S 16S
- 40A 28A 20A	- 40A 27A 24A 20A

Power Output / Efficiency	max. 1,200W / >92%
Mains Voltage Mains Pins	100 - 240VAC / 50 - 60Hz country specific
Operating Temperature	-20°C to +40°C
WxDxH / Weight	190x360x85mm / 4.5kg
Charge Cord	standard open ends
End Terminals	as per request
Ingress Protection Rating	IP20
Agency Approval	CE

Work Horse for Large Batteries

Weigh only at 4.5kg, the light compact box is brimming with power (max. 1,200W)

Compact and Quiet

- Extremely quiet load-controlled fan-cooled mechanism
- Quick & economical response to change requests, for both hard-& soft-ware

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- CAN-Bus
- Ignition Lock
- Dry Relay
- Remote Display
- Detachable Wall-Mount Brackets

Caravans, Industrial Machines, Farming Tools, Boats, Yachts





Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4
4S 7S 10S 14S	4S 8S 12S 14S 16S
- 50A 35A 25A	- 50A 35A 30A 25A

Power Output / Efficiency	max. 1,500W / >92%
Mains Voltage Mains Pins	100 - 240VAC / 50 - 60Hz country specific
Operating Temperature	-20°C to +40°C
WxDxH / Weight	287x226x86.7mm / 4.5kg
Charge Cord	standard open ends
End Terminals	as per request
Ingress Protection Rating	IP20
Agency Approval	CE

Work Horse for Large Batteries

Fan-cooled

Weigh only at 4.5kg, the light compact box is brimming with power (max. 1,500W)

Compact and Quiet

- Extremely quiet load-controlled fan-cooled mechanism
- Quick & economical response to change requests, for both hard-& soft-ware

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- CAN-Bus
- Ignition Lock
- Dry Relay
- Remote Display
- Detachable Wall-Mount Brackets

Caravans, Industrial Machines, Farming Tools, **Boats, Yachts**

IP65 to IP68 Waterproof

Designed for marine platforms, the advanced power electronics works well under the rain / water splashes.





NOVA-100

IP68, Shock / Vibration-proof,

Condensation-proofBuilt for the demanding outdoor
adventures with smart LED display

Waterproof

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- Retractable Steel Bracket

Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4
4S 7S 10S 14S	4S 8S 12S 14S 16S
7A 4A 2.5A 2A	7A 4A 2.5A 2.2A 2A

Power Output / Efficiency	max. 100W / >89%
Mains Voltage Mains Pins	100 - 240VAC / 50 - 60Hz country specific
Operating Temperature	-30°C to +40°C
WxDxH / Weight	85x175x45mm / 850g
Charge Cord	1.2m, standard open ends
End Terminals	as per request
Ingress Protection Rating	IP68
Agency Approval	CE

e-Bikes, Motorbikes, Farming Tools, Boats, Yachts



ATLAS-300

Li-ion

10S

14S

5A

7S

10A

45

20A

Waterproof

Nominal Charge Current for Li-based Batteries

45

20A

85

10A

LiFePO4

12S

14S

6А

16S

5A

1 1	
Power Output / Efficiency	max. 300W / >92%
Mains Voltage Mains Pins	100 - 240VAC / 50 - 60Hz country specific
Operating Temperature	-30°C to +40°C
WxDxH / Weight	207x196x70mm / 3.15kg
Charge Cord	1.2m, standard open ends
End Terminals	as per request
Ingress Protection Rating	IP65
Agency Approval	CE

IP65, Shock / Vibration-proof, Condensation-proof

Built for the mariner, the industry and the tough environment

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles

- CAN-Bus
- Ignition Lock
- Dry Relay
- Remote Display

Caravans, Floor Scrubbing Machines, Hydraulic Lifts, Farming Tools, Boats, Yachts



ATLAS-500

Li-ion

10S

11A

14S

9A

7S

45

Nominal Charge Current for Li-based Batteries

45

85

17A

LiFePO4

12S

11A

14S

10A

16S

9A

max. 500W / >92%
100 - 240VAC / 50 - 60Hz country specific
-30°C to +40°C @ 100VAC
237x196x70.5mm / 4.0kg
1.2m, standard open ends
as per request
IP65
CE

IP65, Shock / Vibration-proof, Condensation-proof

Built for the mariner, the industry and the tough environment

Waterproof

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- CAN-Bus
- Ignition Lock
- Dry Relay
- Remote Display

Caravans, Floor Scrubbing Machines, Hydraulic Lifts, Farming Tools, Boats, Yachts



Nominal Charge Current for Li-based Batteries

LI-IOII	LIFEPU4
4S 7S 10S 14S	4S 8S 12S 14S 16S
- 22A 15A 11A	- 23A 15A 13A 11A
Power Output / Efficiency	max. 650W / >92%

Р Mains Voltage 100 - 240VAC / 50 - 60Hz Mains Pins country specific -30°C to +40°C Operating Temperature WxDxH / Weight 232.4x200x86.6mm / 4.0kg Charge Cord 1.2m, standard open ends **End Terminals** as per request Ingress Protection Rating **IP65** Agency Approval CE

IP65, Shock / Vibration-proof, Condensation-proof

Built for the mariner, the industry and the tough environment

Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- CAN-Bus
- Ignition Lock
- Dry Relay
- Remote Display

Caravans, Floor Scrubbing Machines, Hydraulic Lifts, Farming Tools, Boats, Yachts



ATLAS-750

Waterproof

Nominal Charge Current for Li-based Batteries

Li-ion	LiFePO4
4S 7S 10S 14S	4S 8S 12S 14S 16S
- 25A 17A 13A	- 25A 17A 15A 13A

Power Output / Efficiency max. 750W / >92% 100 - 240VAC / 50 - 60Hz Mains Voltage Mains Pins country specific -30°C to +40°C Operating Temperature WxDxH / Weight 217x225x105mm / 4.8kg Charge Cord 1.2m, standard open ends **End Terminals** as per request Ingress Protection Rating IP65 Agency Approval CE

IP65, Shock / Vibration-proof, Condensation-proof

Built for the mariner, the industry and the tough environment

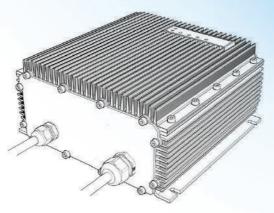
Auto-Detect

- Start fresh the charge cycle at certain pre-set days or voltage level
- Auto sending out of programmed "wake-up pluses"

Optional Features

- Customized Charge Profiles
- CAN-Bus
- Ignition Lock
- Dry Relay
- Remote Display

Caravans, Hydraulic Lifts, Floor Scrubbing Machines, Farming Tools, Boats, Yachts



Product Features

MEC chargers come with universal mains (100 - 240VAC / 50 - 60Hz) respond quick to request for changes and are designed to perform well even under extreme conditions (from -30 $^{\circ}$ C to +40 $^{\circ}$ C). Feature highlights as follows:



IP65/68 Waterproof

Specially designed for marine platforms, the advanced power electronics works well under the rain / water splashes.



Shock / Vibration-proof, Condensation-proof

Stable performance with shock / vibration-proof; best for industrial usage. Optional pressure vent prevents condensation.



Convection- / Fan-cooled with Temperature Sensor (Optional)

Extremely quiet self-cooled load- / temperature-controlled mechanism prevents overheat; auto charge-voltage adjustment helps maintain long battery life.



Customized Charge Profiles, CAN-Bus (Optional)

Parameters can be set precisely to fit specific requirements; if in need, customized charge profiles available off-the-shelf, for uploading via the integrated data port.



3 Charging Modes

General Mode, Deep Discharge Recovery Mode attempts to revive a "dead" battery & Maintenance Mode for batteries in winter storage.



Wide Range of Output Power

From 40W to 1,500W; or talk to our experts for the desired output power.



Auto-detect

Start fresh the charge cycle at certain pre-set days or voltage level; programmed "wake-up pluses" for batteries in sleeping mode.



Definitely Safe

Equipped with short circuit, overload and reverse polarity protection; optional ignition-lock to prevent starting up the vehicles / machines while charging in process.



Customized Terminals / Charge Cords, Localized Pins

Enclosures come with specified battery-pole terminals; optional dry-relay-contact. Charge cords at your desired length with applicable AC-pins (EU, US, AU or UK).



Handy, Portable, Perfect Travel Companion

As light as 290g, a perfect travel-mate for both lithium- / lead-based batteries.



Chic Appearance

Smart LED / LCD display. Optional Remote Display showing voltage and current, charged-in capacity and phase. Aluminum alloy enclosures. Retractable steel brackets. Optional detachable wall-mount racks.

MEC battery chargers are thus widely applied, a stable and reliable daily necessity.



MEC-Energietechnik GmbH

MEC-Energietechnik GmbH or MEC, established in 2007 in Villach, Austria, originated from Mengling Power Electronic (Dong Guan) Co. Ltd. in China since 1989. We established subsequent foothold in Hong Kong in 1999 which serves as a major sourcing and transit hub. MEC aims at providing quality, best-in-value, and timely ODM/OEM products for clients worldwide.



Hong Kong, China - Asia Pacific Hub

Office in Hong Kong plays a key role in taking care clients from the Asia Pacific region.

Villach, Austria - Headquarters

Core team of experienced engineers in Austria leads MEC's R&D arm, ensuring products of our own label cater the latest market and technological needs.





Dong Guan, China - All-rounded Production Line

Our self-operating ISO 9001:2015 certified factory located in Dong Guan, China, offers one-stop, customized power solutions pinpointing specific needs.





MEC-Energietechnik GmbH

Villach, Austria, Headquarters

E-mail: office@mec-energietechnik.at

Tel: +43 (0) 4242 55100

Energiestrasse 3, 9500 Villach

Austria, Europe

Hong Kong, China, Asia Pacific Hub Sales and Customer Service

E-mail: mec@mec-mainland.com

Tel: +852 2366 9610



mec-energietechnik.at