

Lead-Acid Battery 3-Step Charger: 6/12V - 500 mA 111-008 PlugTop Series

This plug-top battery charger is ideal for maintaining your batteries in top condition.

It serves its purpose best with motor cars or any other battery powered equipment, being kept in an idle state over a long period of time.

Typical Applications:

- Motor cars, mostly kept in the garage
- Vintage cars, rarely ever driven
- Emergency Gen-Sets, seldomly started up
- Batt.powered lawn mowers, in winter store
- Batt.powered gardening equipment, in winter store



Despite its comparatively modest charge current, the 3-stage characteristic of this charger will still deliver the energy necessary to fully re-charge and maintain moderately sized batteries within a reasonably short period of time.

The charger outputs a constant charge current of 500mA until the charge voltage has climbed to 14.7V (6.9V for 6V-batteries). Starting from there, the Charge voltage is now being held constant for about 60 minutes, allowing the charge current to gradually decay to a small "trickle" current towards the end of this timed period. The battery has now been charged 80% of its capacity.

At this point the device steps down its charge voltage to 13.8V (6.9V for 6V-batteries), float-charging the battery with a small trickle current to compensate for its self discharge, a condition inherent to all batteries.

The 3 charge phases are being indicated by distinctly coloured LEDs:

- Red for "Boost Phase" (Const. Current)
- Amber for "Timer Phase"
- Green for "Float Phase"

Device is automatically protected when:

- Lead wires of charger are reversely connected
- Lead wires of charger are shorted

Technical Specifications

MEC Article Number	111-06501-100
Operating voltage	230V~ 50Hz
Charging current	max. 500mA
Battery voltage	6V / 12V switch
End of charge Voltage	6V-battery: 7.3V / 12V-battery:14.7V
Trickle charge	6V-battery: 6.9V / 12V-battery:13.8V
Size (LxWxH)	88x65x48mm
Weight	550g

3-step Lead-Acid Battery Chargers: 6V/ 12V /24V, 40W 111-040 PlugTop series

This series of plug-top chargers delivers the power and performance one would expect only of devices of much bigger size. These very efficient chargers feature obvious advantages over conventional types:

- Very lightweight and compact
- Universal input 100...240V
- Selector switch to choose from 2 different charge voltages
- Extreme mains fluctuations do not affect charge voltage



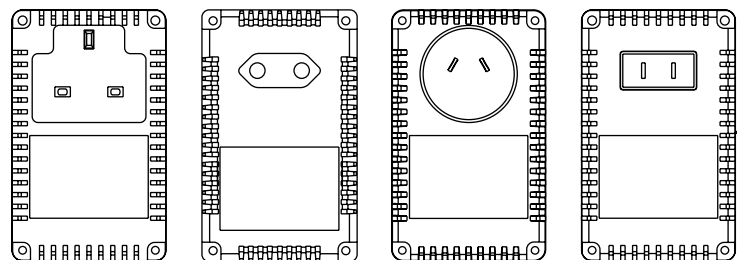
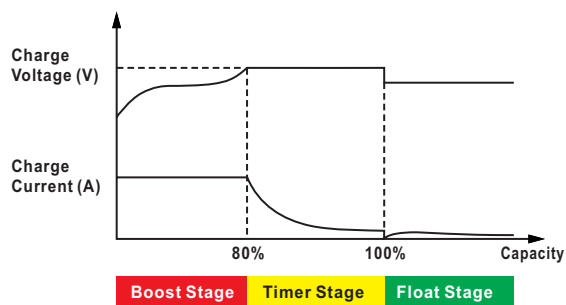
Despite its small size, the 3-stage characteristic of this charger will still deliver the energy necessary to fully re-charge and maintain moderately sized batteries, within a reasonably short period of time.

The charger outputs a constant charge current until the charge voltage has climbed to 14.7V (7.3V / 29.4V). Starting from there, the Charge voltage is being held constant for about 120 minutes, allowing the charge current to gradually decay to a small "trickle" current, towards the end of this timed period. at this time the battery is full.

At this point the charge voltage drops to 13.8V (6.9V /27.6V), float-charging the battery with a small trickle current to compensate for its self discharge, a condition inherent to all batteries.

The 3 charge phases are being indicated by distinctly coloured LEDs:

- Red for "Boost Phase" (Constant Current)
- Amber for "Timer Phase"
- Green for "Float Phase"



Technical Specifications

MEC Article Number	111-03272-130	111-06152-130	111-06272-130	111-06272-131	111-12152-130
Rated input	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC
Nominal battery voltage	6V	12V	12V	6/12V	24V
Output current	2.7A	1.5A	2.7A	2.7A	1.5A
Absorption voltage	7.3V	14.7V	14.7V	7.3/14.7V	29.4V
Float voltage	6.9V	13.8V	13.8V	6.9/13.8V	27.6V
Start-Up voltage	>2.5V	>2.5V	>2.5V	>2.5V	>12V
Operating temperature	0-40°C				
Dimension / Weight	106*65*46mm / 295g				

3-step Lead-Acid Battery Chargers: 12V/ 24V, 100W 121-100 Desktop series

This series of compact battery chargers delivers the power one would expect of chargers of a bulkier construction. The robust metal housing not only scores with attractive appearance, its inherent shielding properties are much valued when EMC / EMI is an issue.

General Features:

- Detachable wall-mount brackets
- Compact size by switch mode technology
- Mains cord fixed, with On / Off switch
- Output cord fixed or screw-block connector
- Convection cooled up to 6A

3-Step Charge Characteristics:

The charger outputs a constant charge current until the charge voltage has climbed to 14.7V (7.3V / 29.4V). Starting from there, the Charge voltage is being held constant for about 120 minutes, allowing the charge current to gradually decay to a small "trickle" current, towards the end of this timed period. at this time the battery is full.

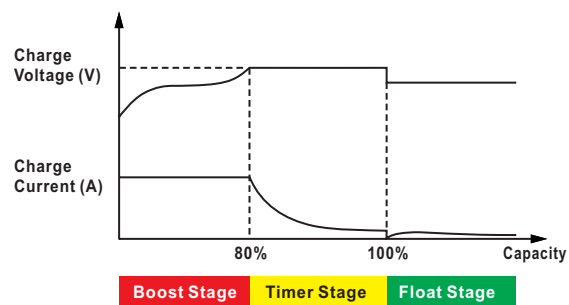
At this point the charge voltage drops to 13.8V (27.6V), float-charging the battery with a small trickle current to compensate for its self discharge, a condition inherent to all lead based batteries.

The 3 charge phases are being indicated by distinctly coloured LEDs:

- Red for "Boost Phase" (constant current)
- Amber for "Timer Phase"
- Green for "Float Phase"

Other:

- Charge status indicated by 3 separate LEDs
- Short circuit-and reverse polarity protection
- Safety certificates for EU, GB, AU, NZ



Technical Specifications:

MEC Article Number	121-06402-100	121-06502-100	121-06602-100	121-12302-100
Rated input	230VAC	230VAC	230VAC	230VAC
Nominal battery voltage	12V	12V	12V	24V
Output current	4A	5A	6A	3A
Absorption voltage	14.7V	14.7V	14.7V	29.4V
Float voltage	13.8V	13.8V	13.8V	27.6V
Start-Up voltage	>8V	>8V	>8V	>16V
Operating temperature	0-40°C			
Dimension / Weight	152*110*42mm / 800g			

3-step Lead-Acid Battery Chargers: 12V/ 24V, 150W 121-150 Desktop series

This series of compact battery chargers delivers the power one would expect of chargers of a bulkier construction. The robust metal housing not only scores with attractive appearance, its inherent shielding properties are much valued when EMC / EMI is an issue.

General Features:

- Detachable wall-mount brackets
- Compact size by switch mode technology
- Mains cord fixed, with On / Off switch
- Output cord fixed or screw-block connector
- Fan speed load dependent

3-Step Charge Characteristics:

The charger outputs a constant charge current until the charge voltage has climbed to 14.7V (7.3V / 29.4V). Starting from there, the Charge voltage is being held constant for about 120 minutes, allowing the charge current to gradually decay to a small "trickle" current, towards the end of this timed period. at this time the battery is full.

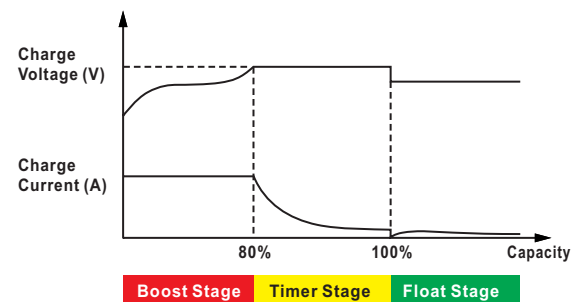
At this point the charge voltage drops to 13.8V (27.6V), float-charging the battery with a small trickle current to compensate for its self discharge, a condition inherent to all lead based batteries.

The 3 charge phases are being indicated by distinctly coloured LEDs:

- Red for "Boost Phase" (constant current)
- Amber for "Timer Phase"
- Green for "Float Phase"

Other:

- Charge status indicated by 3 separate LEDs
- Short circuit-and reverse polarity protection
- Safety certificates for EU, GB, AU, NZ



Technical Specifications:

MEC Article Number	121-06802-100	121-06103-100	121-12502-100
Rated input	230VAC	230VAC	230VAC
Nominal battery voltage	12V	12V	24V
Output current	8A	10A	5A
Absorption voltage	14.7V	14.7V	29.4V
Float voltage	13.8V	13.8V	27.6V
Start-Up voltage	>8V	>8V	>16V
Operating temperature	0-40°C		
Dimension / Weight	174*112*45mm / 930g		

Lead-Acid Battery Chargers: convection cooled 121-151 Desktop series

• For Wheel chairs, Golf carts, Scooters, ...

This fully sealed battery charger has been designed with the need of wheel chair users in mind. Convection cooling guarantees a perfectly silent operation in quiet surroundings.

Efficient high frequency switching technology produces little internal heat, with the well crafted enclosure staying cool, to the touch of the hand.

Carefully balanced charge parameters provide optimal charge conditions for the battery, resulting into a much extended range of mobility for the wheel chair user and a prolonged battery life.



General features:

- Desktop or on-board mounting bracket
- Noiseless operation by convection cooling
- Fully sealed metal enclosure, no cooling slots
- Metal enclosure provides excellent EMI/EMC shielding properties
- State of charge indicated by distinctly visible LEDs
- Possible connection problems, between battery and charger, signaled by LED
- Deep-discharged battery: signaled by LED
- "Battery-Full" criteria: current-threshold detection
- Charge characteristics: CC/CV/CV
- Universal Mains Input: 100VAC-240VAC

Other features:

- Mains Cord fixed or with detachable IEC-socket
- Output cord fixed, termination customized
- Safety certificates for EU,GB,AU,NZ
- Detachable brackets for wall mounting

Technical Specifications

MEC Article Number	121-06802-131	121-12502-131
Rated input	100-240VAC	100-240VAC
Nominal battery voltage	12V	24V
Output current	8A	5A
Operating efficiency @ 230VAC	>85%	>87%
Absorption voltage	14.7V	29.4V
Float voltage	13.8V	27.6V
Start-Up voltage	>8V	>16V
Operating temperature	0-40°C	
Dimension / Weight	174*112*45mm / 1.1kg	

3-step Lead-Acid Battery Chargers: 12V /24V, 150W 161-150 FlatPack series

• Gel-, AGM-,Wet-, Calcium- Battery user selectable

All members of this family of professional battery chargers provide the user with the choice to adapt to the type of battery (Gel-, AGM-, Wet-, Calcium-battery) needing a precise charge voltage.

4 pre-configured charge profiles can be selected by a slide-switch in the front panel. Further fine-adjustments to charge voltages can be made on request.

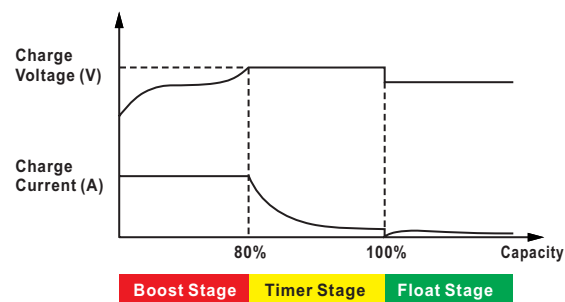


General features:

- Desktop type
- High power density by switching technology
- Main cord fixed
- Charge status by LEDs
- Short and reverse polarity protection
- Safety certificates for EU,GB,AU,NZ

Special features:

- Convection cooling up to 6A
- Fan speed load dependent



Technical Specifications

MEC Article Number	161-06402-100	161-06602-100	161-06802-100	161-06103-100	161-12302-100	161-12502-100
Rated input	230VAC	230VAC	230VAC	230VAC	230VAC	230VAC
Nominal battery voltage	12V	12V	12V	12V	24V	24V
Output current	4A	6A	8A	10A	3A	5A
Start-Up voltage	>6V	>6V	>6V	>6V	>12V	>12V
Operating temperature	0-40°C					
Dimension / Weight	180*110*36mm / 765g					

Battery Type	Calcium		Wet		AGM		Gel	
	12V	24V	12V	24V	12V	24V	12V	24V
Nominal voltage	12V	24V	12V	24V	12V	24V	12V	24V
Absorption voltage	15.6V	31.2V	14.8V	29.6V	14.4V	28.8V	14.2V	28.4V
Float voltage	13.8V	27.6V	13.8V	27.6V	13.8V	27.6V	13.8V	27.6V

3-step Lead-Acid Battery Chargers: 12V / 24V / 36V, 300W 121-300 Desktop series

The members of this family of automatic battery chargers can, depending on their rating, charge batteries of up to 300Ah capacity.

These chargers, operating in the I-U-U type characteristics, will always start up a new charge cycle in constant current mode.

Having reached a cell voltage of 2.4V, the charger changes into the timed absorption-, or constant voltage, mode.

Once this pre-set stretch of time has fully elapsed, the charger goes into standby or float charge, with the charge current now down to a trickle.

Should the battery, suddenly, be drained by a heavy load connected, the charger will re-start in constant current mode and run its charge routine in full, replenishing the battery's energy lost

The robust, attractive metal enclosure with its inherently superior shielding properties, is much appreciated when EMC and EMI are an issue.

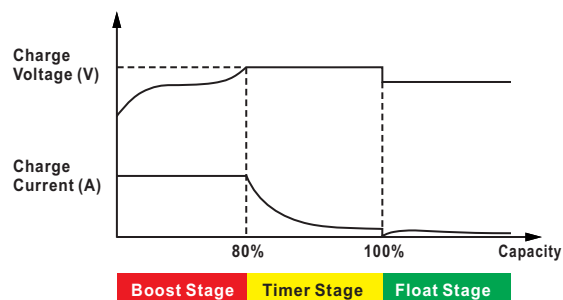
A solid 4-way screw terminal block makes connecting and clamping of wire ends, cable lugs or ring terminals, a straight forward and easy task. Attachable mounting brackets turn the desktop charger, in no time, into a wall mount unit.

An array of 3 distinctively coloured LEDs clearly indicates the state of charge, a "Mains-LED" lights up when "Mains" is on.



Other:

- Switching technology
- Mains: IEC 3-pin terminal
- Universal input, 100...240VAC
- Active PFC
- I-U-U Characteristics
- 4-way screw terminal block
- Short & reverse polarity protection
- Safety: EN60335.2.29, AS/NZ60335.2.29:2004
- EMC / EMI: compliant with EN 55014-1/2



Technical Specifications

MEC Article Number	121-06123-170	121-06153-170	121-06203-170	121-12802-170	121-12113-170	121-18702-170
Rated input	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC
Nominal battery voltage	12V	12V	12V	24V	24V	36V
Output current	12A	15A	20A	8A	11A	7A
Absorption voltage	14.7V	14.7V	14.7V	29.4V	29.4V	44.1V
Float voltage	13.8V	13.8V	13.8V	27.6V	27.6V	41.4V
Start-Up voltage	>8V	>8V	>8V	>16V	>16V	>24V
Operating temperature	0-40°C					
Dimension / Weight	226*112*52mm / 1.45kg					

Lead-Acid Battery Charger: 150W

7 distinctive charge profiles, user-selectable

161-151 FlatPack series

- **Adaptability:** selecting the right charge profile will return optimal performance of battery and application
- **Aging batteries:** proportional absorption timing is the answer
- **Extreme environment:** external temperature sensing can cope



A menu of 7 distinctive, user-selectable charge profiles will align the battery manufacturer's specifications with the respective application or environment the battery is being used in.

In 'edit mode', the user may access any one, out of 7, charge profiles stored in the micro processor. A sequence of strokes at the panel-mounted push button will call up the profile of choice and, if wanted, make it the new default profile. Striking the push button accidentally, will be of no consequence to the charger's new default profile.

Proportional charging takes into account the length of time the charger spent in constant current mode. The following absorption phase will be of proportional length only. This is to avoid that partially discharged batteries, if subjected to a new charge cycle, shall not stay in absorption mode for an unduly length of time. Lengthy overcharging can, at an increased charge voltage, bring about the destructive effects of sulphation - proportional timing can largely avoid this to happen.

Proportional charging also does away with the pitfalls of the popular current-threshold detection as the battery-full criteria. Aging batteries do, towards the end-of-charge, not permit the charge current to drop as low as the set current-threshold level for battery-full detection. Heavily sulphated batteries, bloated out of proportion, may be evidence of this charging practice.

Profile Settings:

P1...Default: recommended for most battery types

P2...Gel-Battery: charging at a reduced charge voltage

P3...Wet-Battery: charging at higher charge voltage

P4...Power Supply: for float- or standby charging

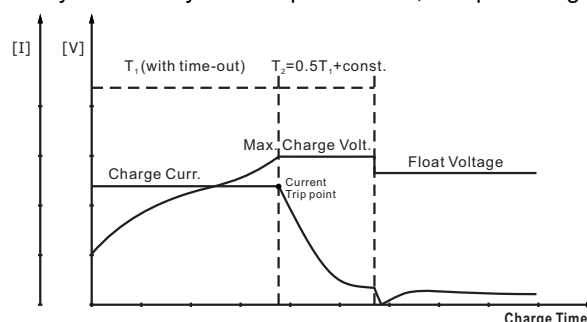
P5...Frequent mains failure: charging at reduced absorption time

P6...Battery capacity outsizes nom. charger rating: increased absorption time

P7...Heavy, intermittent loading: lost charge is instantly being replenished. Loads, connected to the battery of mobile homes or trailers being supplied by fixed mains at camping facilities, will see a steady voltage of 13.8VDC, despite: Heavy, intermittent demand on the battery will not trigger the charger into a renewed charge cycle. Rather, the battery buffers any sudden power drain, compensating for the charger's limitation to deliver beyond it's nominal power rating.

General Features

- Mains 100...240VAC, IEC 3-pin mains terminal, mains switch
- Charge status and "Error" signalling by string of LEDs
- Panel mounted push button for change of charge profiles
- Fan speed: load dependent
- Short- and reverse polarity protection
- Safety certificates for EU,GB,AU,NZ



Technical Specifications

MEC Article Number	161-06402-530	161-06602-530	161-06802-530	161-06103-530	161-12302-530	161-12502-530
Rated input	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC
Nominal battery voltage	12V	12V	12V	12V	24V	24V
Output current	4A	6A	8A	10A	3A	5A
Start-Up voltage	>6V	>6V	>6V	>6V	>12V	>12V
Operating temperature	0-40°C					
Dimension / Weight	180*110*36mm / 765g					

Profile Settings	P1	P2	P3	P4	P5	P6	P7
Nominal voltage	12 / 24V	12 / 24V	12 / 24V	12 / 24V	12 / 24V	12 / 24V	12 / 24V
Absorption voltage	14.7 / 29.4V	14.2 / 28.4V	15.5 / 31.0V	13.8 / 27.6V	14.5 / 29.0V	14.5 / 29.0V	14.5 / 29.0V
Float voltage	13.6 / 27.3 V	13.8 / 27.6V	13.8 / 27.6V	13.8 / 27.6V	13.8 / 27.6V	13.8 / 27.6V	13.8 / 27.6V

Lead-Acid Battery Charger: 300W: 7 distinctive charge profiles, user-selectable 161-301 D-Pack series



- **Adaptability:** selecting the right charge profile will return optimal performance of battery and application
 - **Aging batteries:** proportional absorption timing is the answer
 - **Extreme environment:** external temperature sensing can cope
- A menu of 7 distinctive, user-selectable charge profiles will align the battery manufacturer's specifications with the respective application or environment the battery is being used in.

In 'edit mode', the user may access any one, out of 7, charge profiles stored in the micro processor. A sequence of strokes at the panel-mounted push button will call up the profile of choice and, if wanted, make it the new default profile. Striking the push button accidentally, will be of no consequence to the charger's new default profile.

Proportional charging takes into account the length of time the charger spent in constant current mode. The following absorption phase will be of proportional length only. This is to avoid that partially discharged batteries, if subjected to a new charge cycle, shall not stay in absorption mode for an unduly length of time. Lengthy overcharging can, at an increased charge voltage, bring about the destructive effects of sulphation - proportional timing can largely avoid this to happen.

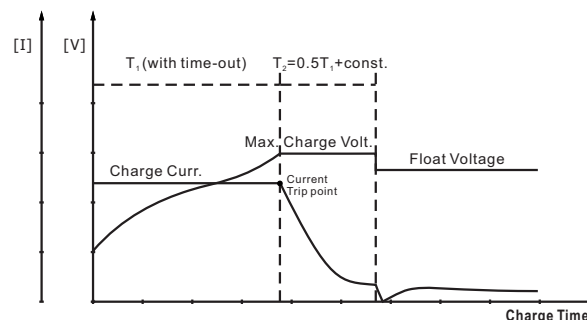
Proportional charging also does away with the pitfalls of the popular current-threshold detection as the battery-full criteria. Aging batteries do, towards the end-of-charge, not permit the charge current to drop as low as the set current-threshold level for battery-full detection. Heavily sulphated batteries, bloated out of proportion, may be evidence of this charging practice.

Profile Settings:

- P1...Default:** recommended for most battery types
- P2...Gel-Battery:** charging at a reduced charge voltage
- P3...Wet-Battery:** charging at higher charge voltage
- P4...Power Supply:** for float- or standby charging
- P5...Frequent mains failure:** charging at reduced absorption time
- P6...Battery capacity outsizes nom. charger rating:** increased absorption time
- P7...Heavy, intermittent loading:** lost charge is instantly being replenished. Loads, connected to the battery of mobile homes or trailers being supplied by fixed mains at camping facilities, will see a steady voltage of 13.8VDC, despite: Heavy, intermittent demand on the battery will not trigger the charger into a renewed charge cycle. Rather, the battery buffers any sudden power drain, compensating for the charger's limitation to deliver beyond it's nominal power rating.

General Features

- Mains 100...240VAC, IEC 3-pin mains terminal, mains switch
- Active PFC 0.99
- Charge status and "Error" signalling by string of LEDs
- Panel mounted push button for change of charge profiles
- Fan speed: load dependent
- Short- and reverse polarity protection
- Safety certificates for EU,GB,AU,NZ



Technical Specifications

MEC Article Number	161-06123-570	161-06153-570	161-06203-570	161-12802-570	161-12103-570	161-12123-570
Rated input	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC	100-240VAC
Nominal battery voltage	12V	12V	12V	24V	24V	24V
Output current	12A	15A	20A	8A	10A	12A
Start-Up voltage	>6V	>6V	>6V	>12V	>12V	>12V
Operating temperature	0-40°C					
Dimension / Weight	238*130*58mm / 1.7kg					

Profile Settings	P1	P2	P3	P4	P5	P6	P7
Nominal voltage	12 / 24V	12 / 24V	12 / 24V	12 / 24V	12 / 24V	12 / 24V	12 / 24V
Absorption voltage	14.7 / 29.4V	14.2 / 28.4V	15.5 / 31.0V	13.8 / 27.6V	14.5 / 29.0V	14.5 / 29.0V	14.5 / 29.0V
Float voltage	13.6 / 27.3 V	13.8 / 27.6V	13.8 / 27.6V	13.8 / 27.6V	13.8 / 27.6V	13.8 / 27.6V	13.8 / 27.6V

Lead-Acid Battery Charger: 750W 7 distinctive charge profiles, user-selectable 161-750 V-Pack series



- **Adaptability:** selecting the right charge profile will return optimal performance of battery and application
 - **Aging batteries:** proportional absorption timing is the answer
 - **Extreme environment:** external temperature sensing can cope
- A menu of 7 distinctive, user-selectable charge profiles will align the battery manufacturer's specifications with the respective application or environment the battery is being used in.

In 'edit mode', the user may access any one, out of 7, charge profiles stored in the micro processor. A sequence of strokes at the panel-mounted push button will call up the profile of choice and, if wanted, make it the new default profile. Striking the push button accidentally, will be of no consequence to the charger's new default profile.

Proportional charging takes into account the length of time the charger spent in constant current mode. The following absorption phase will be of proportional length only. This is to avoid that partially discharged batteries, if subjected to a new charge cycle, shall not stay in absorption mode for an unduly length of time. Lengthy overcharging can, at an increased charge voltage, bring about the destructive effects of sulphation - proportional timing can largely avoid this to happen.

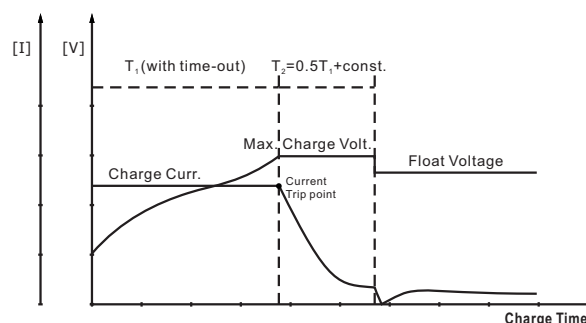
Proportional charging also does away with the pitfalls of the popular current-threshold detection as the battery-full criteria. Aging batteries do, towards the end-of-charge, not permit the charge current to drop as low as the set current-threshold level for battery-full detection. Heavily sulphated batteries, bloated out of proportion, may be evidence of this charging practice.

Profile Settings:

- P1...Default:** recommended for most battery types
- P2...Gel-Battery:** charging at a reduced charge voltage
- P3...Wet-Battery:** charging at higher charge voltage
- P4...Power Supply:** for float- or standby charging
- P5...Frequent mains failure:** charging at reduced absorption time
- P6...Battery capacity outsizes nom. charger rating:** increased absorption time
- P7...Heavy, intermittent loading:** lost charge is instantly being replenished. Loads, connected to the battery of mobile homes or trailers being supplied by fixed mains at camping facilities, will see a steady voltage of 13.8VDC, despite: Heavy, intermittent demand on the battery will not trigger the charger into a renewed charge cycle. Rather, the battery buffers any sudden power drain, compensating for the charger's limitation to deliver beyond it's nominal power rating.

General Features

- Mains 100...240VAC, IEC 3-pin mains terminal, mains switch
- Active PFC 0.99
- Charge status and "Error" signalling by string of LEDs
- Panel mounted push button for change of charge profiles
- Fan speed: load dependent
- Short- and reverse polarity protection
- Safety certificates for EU,GB,AU,NZ



Technical Specifications

MEC Article Number	161-06503-570		161-12253-570		161-18173-570		
Rated input	100-240VAC		100-240VAC		100-240VAC		
Nominal battery voltage	12V		24V		36V		
Output current	50A		25A		17A		
Start-Up voltage	>6V		>12V		>18V		
Operating temperature	0-40°C						
Dimension / Weight	300*170*75mm / 2.9kg						
Profile Settings	P1	P2	P3	P4	P5	P6	P7
Nominal voltage	12 / 24 / 36V	12 / 24 / 36V	12 / 24 / 36V	12 / 24 / 36V	12 / 24 / 36V	12 / 24 / 36V	12 / 24 / 36V
Absorption voltage	14.7 / 29.4 / 41.4V	14.2 / 28.4 / 42.6V	15.5 / 31.0 / 46.5V	13.8 / 27.6 / 41.4V	14.5 / 29.0 / 43.5V	14.5 / 29.0 / 43.5V	14.5 / 29.0 / 43.5V
Float voltage	13.6 / 27.3 / 40.9V	13.8 / 27.6 / 41.4V	13.8 / 27.6 / 41.4V	13.8 / 27.6 / 41.4V	13.8 / 27.6 / 41.4V	13.8 / 27.6 / 41.4V	13.8 / 27.6 / 41.4V

Lead-Acid Battery Chargers: 300W Freely programmable battery charger 161-300FP series

- 5 programmable charge phases
- External temperature sensing

This type of charger has been designed to meet the most demanding requirements for charging costly, high value batteries of uncompromising reliability.

The device allows for all charging parameters to be precisely set, so as to accommodate any battery's specific characteristics. The charger is externally programmable. The micro-controller is accessed through an external interface device and a computer, via the DC-output terminals. Custom settings may either be done by the factory, prior to shipping, or by the distributor himself to instantly adapt to the individual customer's needs.

Major features, programmable:

- Lead-, Lithium-, Nickel & NiZn based battery characteristics
- Battery temperature compensation
- 5 programmable charge phases for lead acid batteries
- Voltage-, current limiting- & timer functions

Monitoring correct functioning, Ah-counting and logging of its operating history turn the charger into a powerful diagnostic tool, for analysis and avoidance of possible error conditions in back-up systems .

Technical Specifications

MEC Article Number	161-06203-440	161-06153-440	161-12103-440	161-12602-440	161-18702-440	161-24502-440
Nominal battery voltage	12V	12V	24V	24V	36V	48V
Output current	20A	15A	10A	6A	7A	5A
Progr. Voltage range	10...16.5V	10...16.5V	20...33.0V	20...33.0V	30...49.5V	40...66.0V
Start-Up voltage	>8V	>8V	>16V	>16V	>24V	>32V
Input voltage	230VAC (with 3-Pin IEC-Plug), active PFC					
Protection / Approvals	IP21 / EN60335-1 / EN60335-2-29					
Operating temperature	0 to 40°C (Power derating at excessive temperature), external temp. sensor					
Dimension / Weight	238*130*58mm / 1.6kg					



Lead-Acid Battery Chargers: 600W

Freely programmable battery charger

121-600FP series

- 5 programmable charge phases
- External temperature sensing

This type of charger has been designed to meet the most demanding requirements for charging costly, high value batteries of uncompromising reliability.

The device allows for all charging parameters to be precisely set, so as to accommodate any battery's specific characteristics. The charger is externally programmable. The micro-controller is accessed through an external interface device and a computer, via the DC-output terminals. Custom settings may either be done by the factory, prior to shipping, or by the distributor himself to instantly adapt to the individual customer's needs.

Special Features:

- Completely programmable
- Lead-, Lithium-, Nickel & NiZn based battery characteristics
- 5 programmable charge phases for lead acid batteries
- Voltage-, current limiting- & timer functions
- Monitoring correct functioning
- Operating totally automatic
- Battery monitoring
- Ah counter
- Battery temperature compensation
- Battery status LED indicators
- Compact size and low weight

Monitoring correct functioning, Ah-counting and logging of its operating history turn the charger into a powerful diagnostic tool, for analysis and avoidance of possible error conditions in back-up systems.

Technical Specifications

MEC Article Number	121-06253-400	121-12173-400	121-18123-400	121-24902-400
Nominal battery voltage	12V	24V	36V	48V
Output current	25A	17A	12A	9A
Progr. Voltage range	10...16.5V	20...33.0V	30...49.5V	40...66.0V
Start-Up voltage	>8V	>12V	>24V	>32V
Input voltage	230VAC (with 3-Pin IEC-Plug)			
Protection / Approvals	IP21 / EN60335-1 / EN60335-2-29			
Operating temperature	0 to 40°C (Power derating at excessive temperature), external temp. sensor			
Dimension / Weight	240*108*82mm / 2.1kg			



Lead-Acid Battery Chargers: 1000W

9 distinctive charge profiles at your disposal

161-1000 V-Pack series

This series of battery chargers has been designed and built to meet the most stringent specifications for batteries of high value, uncompromising reliability and endurance.

The user may access any one, out of 9, charge profiles stored in the micro processor. A sequence of strokes at the push button, mounted on the top panel, will call up the profile of your choice and new default.



The charger's micro controller can be accessed externally by an ordinary PC, via a dedicated interface device and a USB or RS232 port.

The regular units shipped come with 9 factory-set, standard charge profiles. Custom settings may either be done by the factory, prior to shipping, or by the distributor himself: a tool to instantly adapt to the varying needs of individual customers.

The charger may remain permanently connected to the continuously monitored battery. A diagnostic routine will detect and signal possible error conditions, by way of a distinctly flashing Error-LED.

Charge profiles may be made up of 1 to 5 individual phases, with each phase having varying parameter settings, such as: current- and voltage thresholds, Ah-counting or time-out conditions. Any one of these parameters may be set as a criterion for switching over to the next charge phase.

Cell balancing may intersperse the regular charge routines, to be automatically activated after a set number of days have elapsed or after a given amount of Ah-hours has been charged in.

Temperature limits and gradients can be configured, to either terminate the charge process or regulate the charge current, with respect to the environmental conditions the battery is being operated in.

The charger also retains, over the past 32 charge cycles, statistical data about the charging activities and error condition. This information can, via the RS232 interface, be retrieved and analyzed.

Battery types and capacities, to choose from:

- P1: Gel 50...80Ah
- P2: Gel 100...400Ah
- P3: Wet 50...80Ah
- P4: Wet 100...400Ah
- P5: Optima
- P6: Genesis up to 60Ah
- P7: Trojan 70...150Ah
- P8: PzS Wet 90Ah
- P9: Calcium 70...150Ah

General Features:

- Switching technology with active PFC
- Battery monitoring and charge history recording
- Error conditions statistics recorded
- External battery temperature sensing
- Overheat protection
- Overload- and short circuit protection
- Reverse polarity protection
- Power de-rating at elevated environmental temp.
- Spark suppression during battery connecting
- Self Diagnostics at start-up
- Safety: EN 60950, EN 6100-6-2, EN 6100-6-3

Technical Specifications

MEC Article Number	161-12343-570	161-18243-570	161-24183-570
Nominal battery voltage	24V	36V	48V
Range of configurable charge currents	0.3...34A	0.2...24A	0.15...18A
Range of configurable charge voltages	20...33V	30...49.5V	40...66V
Start-Up voltage	>16V	>24V	>32V
Max. continuous output power	1000W		
Input voltage	100-240V 50/60Hz		
Dimension / Weight	340*190*75mm / 4.3kg		

Lead-Acid Battery Chargers: 600W, convection cooled 9 distinctive charge profiles at your disposal 121-600 V-Pack series

This series of battery chargers has been designed and built to meet the most stringent specifications for batteries of high value, uncompromising reliability and endurance.

The user may access any one, out of 9, charge profiles stored in the micro processor. A sequence of strokes at the push button, mounted on the top panel, will call up the profile of your choice and new default.

The charger's micro controller can be accessed externally by an ordinary PC, via a dedicated interface device and a USB or RS232 port.

The regular units shipped come with 9 factory-set, standard charge profiles. Custom settings may either be done by the factory, prior to shipping, or by the distributor himself: a tool to instantly adapt to the varying needs of individual customers.

The charger may remain permanently connected to the continuously monitored battery. A diagnostic routine will detect and signal possible error conditions, by way of a distinctly flashing Error-LED.

Charge profiles may be made up of 1 to 5 individual phases, with each phase having varying parameter settings, such as: current- and voltage thresholds, Ah-counting or time-out conditions. Any one of these parameters may be set as a criterion for switching over to the next charge phase.

The regular charge routines may be interspersed with a cell-balancing cycle, to be automatically activated after a set number of days have elapsed, or after a given amount of Ah-hours have been charged in.

Temperature limits and gradients can be configured, to either terminate the charge process or regulate the charge current, with respect to the environmental conditions the battery is being operated in.

The charger also retains, over the past 32 charge cycles, statistical data about the charging activities and error condition. This information can, via the RS232 interface, be retrieved and analyzed.



Battery types and capacities, to choose from:

- P1: Gel 50...80Ah
- P2: Gel 100...400Ah
- P3: Wet 50...80Ah
- P4: Wet 100...400Ah
- P5: Optima
- P6: Genesis up to 60Ah
- P7: Trojan 70...150Ah
- P8: PzS Wet 90Ah
- P9: Calcium 70...150Ah

General Features:

- Convection cooled
- Switching technology
- Battery monitoring and charge history recording
- Error conditions statistics recorded
- External battery temperature sensing
- Overheat protection
- Overload- and short circuit protection
- Reverse polarity protection
- Power de-rating at elevated environmental temp.
- Spark suppression during battery connecting
- Self Diagnostics at start-up
- Safety: EN 60950, EN 6100-6-2, EN 6100-6-3

Technical Specifications

MEC Article Number	121-12173-510	121-18123-510	121-24902-510
Nominal battery voltage	24V	36V	48V
Range of configurable charge currents	0.3...17A	0.2...12A	0.15...9A
Range of configurable charge voltages	20...33V	30...49.5V	40...66V
Start-Up voltage	>16V	>24V	>32V
Max. continuous output power	600W		
Input voltage, with voltage selector switch	110/230V 50/60Hz		
Dimension / Weight	255*185*130mm / 3.6kg		

Lead-Acid Battery Chargers: 1200W, convection cooled 9 distinctive charge profiles at your disposal 121-1200 V-Pack series

This series of battery chargers has been designed and built to meet the most stringent specifications for batteries of high value, uncompromising reliability and endurance.

The user may access any one, out of 9, charge profiles stored in the micro processor. A sequence of strokes at the push button, mounted on the top panel, will call up the profile of your choice and new default.

The charger's micro controller can be accessed externally by an ordinary PC, via a dedicated interface device and a USB or RS232 port.

The regular units shipped come with 9 factory-set, standard charge profiles. Custom settings may either be done by the factory, prior to shipping, or by the distributor himself: a tool to instantly adapt to the varying needs of individual customers.

The charger may remain permanently connected to the continuously monitored battery. A diagnostic routine will detect and signal possible error conditions, by way of a distinctly flashing Error-LED.

Charge profiles may be made up of 1 to 5 individual phases, with each phase having varying parameter settings, such as: current- and voltage thresholds, Ah-counting or time-out conditions. Any one of these parameters may be set as a criterion for switching over to the next charge phase.

The regular charge routines may be interspersed with a cell-balancing cycle, to be automatically activated after a set number of days have elapsed, or after a given amount of Ah-hours have been charged in.

Temperature limits and gradients can be configured, to either terminate the charge process or regulate the charge current, with respect to the environmental conditions the battery is being operated in.

The charger also retains, over the past 32 charge cycles, statistical data about the charging activities and error condition. This information can, via the RS232 interface, be retrieved and analyzed.



Battery types and capacities, to choose from:

- P1: Gel 50...80Ah
- P2: Gel 100...400Ah
- P3: Wet 50...80Ah
- P4: Wet 100...400Ah
- P5: Optima
- P6: Genesis up to 60Ah
- P7: Trojan 70...150Ah
- P8: PzS Wet 90Ah
- P9: Calcium 70...150Ah

General Features:

- Convection cooled
- Switching technology
- Battery monitoring and charge history recording
- Error conditions statistics recorded
- External battery temperature sensing
- Overheat protection
- Overload- and short circuit protection
- Reverse polarity protection
- Power de-rating at elevated environmental temp.
- Spark suppression during battery connecting
- Self Diagnostics at start-up
- Safety: EN 60950, EN 6100-6-2, EN 6100-6-3

Technical Specifications

MEC Article Number	121-12343-510	121-18243-510	121-24183-510
Nominal battery voltage	24V	36V	48V
Range of configurable charge currents	0.3...34A	0.2...24A	0.15...18A
Range of configurable charge voltages	20...33V	30...49.5V	40...66V
Start-Up voltage	>16V	>24V	>32V
Max. continuous output power	1200W		
Input voltage, with voltage selector switch	110/230V 50/60Hz		
Dimension / Weight	325*255*130mm / 6.6kg		