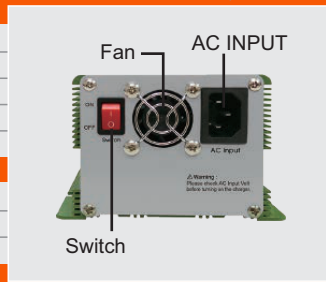
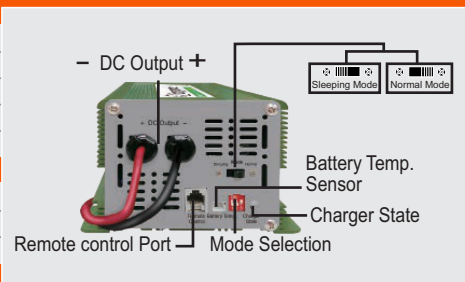


# HTC Multistage Battery Charger

- PFC function. (except HT-C-15L-12 & HT-C-7L-24)
- Sleep mode function.
- Wide input voltage (universal) range operation. (except HT-C-15L-12 & HT-C-7L-24)
- LCD remote control.
- Battery temperature sensor function.
- Tri-LED color indicator for different charge stages.
- Selection switch for different lead-acid battery types.
- Prevents battery from overcharging, and extends battery life.
- Recovery of aging (sulfated) batteries.
- Absorption Charge Stage 1 and Stage 2 and Bulk charge voltages are dependant on MODE settings.

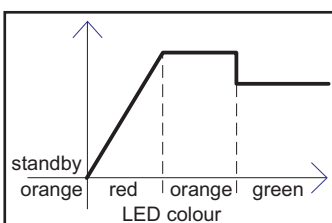


Model	HT-C-15L-12							HT-C-7L-24						
<b>INPUT</b>														
Voltage Range	230V (180 ~ 240V)													
Frequency Range	45 ~ 65Hz													
Efficiency	> 85%													
Power Factor	0.5 at full load (+/-5%)													
Input Socket	IEC plug													
<b>OUTPUT</b>														
Mode Selection	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7
Bulk Stage	14.7V, 15A			14.1V, 1A	14.7V, 1A	12.2V, 15A	13.5V, 15A	29.4V, 7A			28.2V, 0.5A	29.4V, 0.5A	24.5V, 7A	27V, 7A
Absorption Stage (I)	14.7V 15A ~ 0A	14.1V 15A ~ 0A	14.1V 15A ~ 0A	14.1V 1A ~ 0A	14.7V 1A ~ 0A	12.2V 15A	13.5V 15A	29.4V 7A ~ 0A	28.2V 7A ~ 0A	28.2V 7A ~ 0A	28.2V 0.5A ~ 0A	29.4V 0.5A ~ 0A	24.5V 7A	27V 7A
Absorption Stage (II)	/	/	14.7V, 1A max	/	/	/	/	/	/	29.4V, 0.5A max	/	/	/	/
Float Stage	13.5V, 1A max			12.2V, 15A / 13.5V, 15A			27.0V, 0.5A max			24.5V, 7A		27V, 7A		
Max. current output	15A			15A			7A			7A				
Continuous current output	15A			15A			7A			7A				
Recommended battery capacity	45 ~ 150Ah (12V)			/			30 ~ 90Ah (24V)			/				
Leakage current from battery	<1mA			/			<1mA			/				
Sleep Mode function	YES (5A current output only)			/			YES (2.5A current output only)			/				
<b>PROTECTION</b>														
Over Temperature	55°C ±5°C			55°C ±5°C			55°C ±5°C			55°C ±5°C				
Output terminal reverse	By fuse			By fuse			By fuse			By fuse				
Overload	YES			YES			YES			YES				
Output short circuit	YES			YES			YES			YES				
Microprocessor check	YES			YES			YES			YES				
<b>ENVIRONMENT</b>														
Working temperature	-15°C ~ +45°C			-15°C ~ +45°C			-15°C ~ +45°C			-15°C ~ +45°C				
Working humidity	20 ~ 90% RH non-condensing			20 ~ 90% RH non-condensing			20 ~ 90% RH non-condensing			20 ~ 90% RH non-condensing				
Storage temperature humidity	-30°C ~ +70°C, 10 ~ 95% RH			-30°C ~ +70°C, 10 ~ 95% RH			-30°C ~ +70°C, 10 ~ 95% RH			-30°C ~ +70°C, 10 ~ 95% RH				
<b>SAFETY &amp; EMC</b>														
EMI conduction & radiation	Compliance to EN55014-1, EN/IEC 61000-3-2													
EMS immunity	Compliance to EN55014-2, EN/IEC 61000-4-2, EN/IEC 61000-4-4, EN/IEC 61000-4-5, EN/IEC 61000-4-6, EN/IEC 61000-4-11													
LVD	Compliance to EN60335-1, EN/IEC 60335-2-29													
<b>SIZE</b>														
Dimension (LxWxH)	213 x 142 x 72mm													
Weight	1.9kgs													



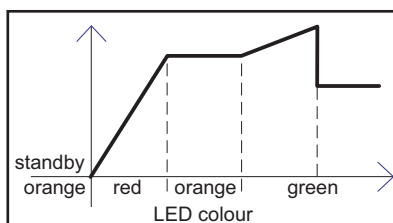
## Charging Volt Graph

(Switch Position: 0 =OFF)

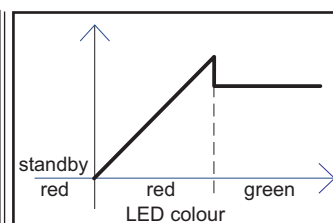


**Mode 1: (100)**  
For lead storage battery

**Mode 2: (120)**  
For gel battery

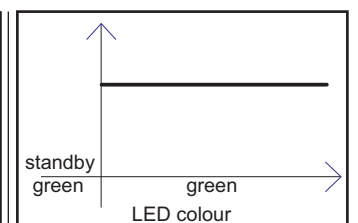


**Mode 3: (003)**  
Suitable for re-charging lead storage battery that is in good condition and completely disconnected from any load.



**Mode 4: (020)**  
For recovery of sulfated (ageing) gel battery.

**Mode 5: (023)**  
For recovery of sulfated (ageing) lead storage battery.



**Mode 6: (123)**  
DC Power Supply  
12.2V (12V spec) / 24.5V (24V spec)

**Mode 7: (000)**  
DC Power Supply  
13.5V (12V spec) / 27V (24V spec)



# OMNIPOWER

THE POWER OF CHOICE

Model	HT-C-30-12							HT-C-15-24						
<b>INPUT</b>														
Voltage Range	100 ~ 240V													
Frequency Range	45 ~ 65Hz													
Efficiency	>85%													
Power Factor	1.0 at full load (+/-5%)													
Input Socket	IEC plug													
<b>OUTPUT</b>														
Mode Selection	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7
Bulk Stage	14.7V, 30A			14.1V,2A	14.7V,2A	12.2V,30A	13.5V,30A	29.4V, 15A			28.2V,1A	29.4V,1A	24.5V,15A	27V, 15A
Absorption Stage (I)	14.7V 30A ~ 0A	14.1V 30A ~ 0A	14.1V 30A ~ 0A	14.1V 2A ~ 0A	14.7V 2A ~ 0A	12.2V 30A	13.5V 30A	29.4V 15A ~ 0A	28.2V 15A ~ 0A	28.2V 15A ~ 0A	28.2V 1A ~0A	29.4V 1A ~0A	24.5V 15A	27V 15A
Absorption Stage (II)	/	/	14.7V, 2A max	/	/	/	/	/	/	29.4V, 1A max	/	/	/	/
Float Stage	13.5V, 2A max					12.2V,30A	13.5V,30A	27.0V, 1A max					24.5V, 15A	27V, 15A
Max. current output	30A								15A					
Continuous current output	30A								15A					
Recommended battery capacity	75 ~ 250Ah (12V)					/			45 ~ 150Ah (24V)					/
Leakage current from battery	<1mA					/			<1mA					/
Sleep Mode function	YES (5A current output only)					/			YES (2.5A current output only)					/
<b>PROTECTION</b>														
Over Temperature	55°C ±5°C													
Output terminal reverse	By fuse													
Overload	YES													
Output short circuit	YES													
Microprocessor check	YES													
<b>ENVIRONMENT</b>														
Working temperature	-15°C ~ +45°C													
Working humidity	20 ~ 90% RH non-condensing													
Storage temperature humidity	-30°C ~ +70°C, 10 ~ 95% RH													
<b>SAFETY &amp; EMC</b>														
EMI conduction & radiation	Compliance to EN55014-1, EN/IEC 61000-3-2													
EMS immunity	Compliance to EN55014-2, EN/IEC 61000-4-2, EN/IEC 61000-4-4, EN/IEC 61000-4-5, EN/IEC 61000-4-6, EN/IEC 61000-4-11													
LVD	Compliance to EN60335-1, EN/IEC 60335-2-29													
<b>SIZE</b>														
Dimension (LxWxH)	252 x 142 x 72mm													
Weight	2.5kgs													



Model	HT-C-60-12							HT-C-30-24						
<b>INPUT</b>														
Voltage Range	100 ~ 240V													
Frequency Range	45 ~ 65Hz													
Efficiency	>85%													
Power Factor	1.0 at full load (+/-5%)													
Input Socket	IEC plug													
<b>OUTPUT</b>														
Mode Selection	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7
Bulk Stage	14.7V, 60A			14.1V,2A	14.7V,2A	12.2V,60A	13.5V,60A	29.4V, 30A			28.2V,1A	29.4V,1A	24.5V,30A	27V, 30A
Absorption Stage (I)	14.7V 60A ~ 0A	14.1V 60A ~ 0A	14.1V 60A ~ 0A	14.1V 2A ~ 0A	14.7V 2A ~ 0A	12.2V 60A	13.5V 60A	29.4V 30A ~ 0A	28.2V 30A ~ 0A	28.2V 30A ~ 0A	28.2V 1A ~0A	29.4V 1A ~0A	24.5V 30A	27V 30A
Absorption Stage (II)	/	/	14.7V, 2A max	/	/	/	/	/	/	29.4V, 1A max	/	/	/	/
Float Stage	13.5V, 2A max					12.2V,60A	13.5V,60A	27.0V, 1A max					24.5V,30A	27V, 30A
Max. current output	60A								30A					
Continuous current output	60A								30A					
Recommended battery capacity	180 ~ 600Ah (12V)					/			90 ~ 300Ah (24V)					/
Leakage current from battery	<1mA					/			<1mA					/
Sleeping Mode function	YES (5A current output only)					/			YES (2.5A current output only)					/
<b>PROTECTION</b>														
Over Temperature	55°C ±5°C													
Output terminal reverse	By fuse													
Overload	YES													
Output short circuit	YES													
Microprocessor check	YES													
<b>ENVIRONMENT</b>														
Working temperature	-15°C ~ +45°C													
Working humidity	20 ~ 90% RH non-condensing													
Storage temperature humidity	-30°C ~ +70°C, 10 ~ 95% RH													
<b>SAFETY &amp; EMC</b>														
EMI conduction & radiation	Compliance to EN55014-1, EN/IEC 61000-3-2													
EMS immunity	Compliance to EN55014-2, EN/IEC 61000-4-2, EN/IEC 61000-4-4, EN/IEC 61000-4-5, EN/IEC 61000-4-6, EN/IEC 61000-4-11													
LVD	Compliance to EN60335-1, EN/IEC 60335-2-29													
<b>SIZE</b>														
Dimension (LxWxH)	335 x 142 x 72mm													
Weight	3.5kgs													

