

# Multistage Battery Charger



**HT-C-15L-12 ;  
HT-C-7L-24**



**HT-C-30-12 ;  
HT-C-15-24**



**HT-C-60-12 ;  
HT-C-30-24**

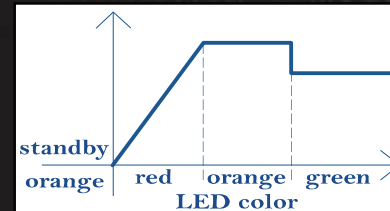
Model No.	HT-C-15L-12							HT-C-7L-24							HT-C-30-12							HT-C-15-24																																		
<b>INPUT</b>																																																								
Voltage range	230V (180~265V)														100 ~ 240VAC																																									
Frequency range	45 ~ 65Hz														45 ~ 65Hz																																									
Efficiency	>=85%														>=85%																																									
Power factor	0.5 at full load (+/-5%)														1.0 at full load (+/-5%)																																									
Input socket	IEC plug														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	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	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, 15A max	14.1V, 15A max	14.1V, 15A max	14.1V, 1A max	14.7V, 1A max	12.2V, 15A	13.5V, 15A	29.4V, 7A max	28.2V, 7A max	28.2V, 7A max	28.2V, 0.5A max	29.4V, 0.5A max	24.5V, 7A	27V, 7A	14.7V, 30A max	14.1V, 30A max	14.1V, 30A max	14.1V, 2A max	14.7V, 2A max	12.2V, 30A	13.5V, 30A	29.4V, 15A max	28.2V, 15A max	28.2V, 15A max	28.2V, 1A max	29.4V, 1A max	24.5V, 15A	27V, 15A																												
Absorption stage (II)	/	/	14.7V, 1A max	/	/	/	/	/	/	29.4V, 0.5A max	/	/	/	/	/	/	14.7V, 2A max	/	/	/	/	/	/	29.4V, 1A max	/	/	/	/																												
Float stage	13.5V, 1A max			12.2V, 15A			13.5V, 15A	27.0V, 0.5A max			24.5V, 7A			27V, 7A	13.5V, 2A max			12.2V, 30A			13.5V, 30A	27.0V, 1A max			24.5V, 15A			27V, 15A																												
Max. current output	15A							7A							30A							15A																																		
Continuous current output	15A							7A							30A							15A																																		
Recommended battery capacity	45 ~ 150Ah (12V)					/					30 ~ 90Ah (24V)					/					75 ~ 250Ah (12V)					/					45 ~ 150Ah (24V)					/																				
Leakage current from battery	<1mA							/							<1mA							/																																		
Sleeping Mode Function	YES ( 5A current output only)							/							YES ( 2.5A current output only)							/							YES ( 5A current output only)							/							YES ( 2.5A current output only)							/						
<b>PROTECTION</b>																																																								
Over temperature	55°C±5°C														55°C±5°C																																									
Input terminal reverse	By fuse														By fuse																																									
Overload	YES														YES																																									
Output short circuit	YES														YES																																									
Microprocessor check	YES														YES																																									
<b>ENVIRONMENT</b>																																																								
Working temp.	-15°C ~ +45°C														-15°C ~ +45°C																																									
Working humidity	20 ~ 90% RH non-condensing														20 ~ 90% RH non-condensing																																									
Storage temp., Humidity	-30°C ~ +70°C (-22°F ~ +158°F) , 10 ~ 95% RH														-30°C ~ +70°C (-22°F ~ +158°F) , 10 ~ 95% RH																																									
Temp. Coefficient	±0.05%/°C (0 ~ 50°C)														±0.05%/°C (0 ~ 50°C)																																									
<b>SIZE</b>																																																								
Dimension (L x W x H)	213 x 142 x 72mm														252 x 142 x 72mm																																									
Weight	1.9kgs														2.5kgs																																									

Model No.	HT-C-60-12							HT-C-30-24						
<b>INPUT</b>														
Voltage range	100 ~ 240VAC													
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
Standby	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
Bulk Stage	14.7V, 60A max			14.1V, 2A max	14.7V, 2A max	12.2V, 60A	13.5V, 60A	29.4V, 30A max	28.2V, 30A max	28.2V, 30A max	28.2V, 1A max	29.4V, 1A max	24.5V, 30A	27V, 30A
Absorption stage (I)	14.7V, 60A max	14.1V, 60A max	14.1V, 60A max	14.1V, 2A max	14.7V, 2A max	12.2V, 60A	13.5V, 60A	29.4V, 30A max	28.2V, 30A max	28.2V, 30A max	28.2V, 1A max	29.4V, 1A max	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, 0.5A 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													
Input terminal reverse	By fuse													
Overload	YES													
Output short circuit	YES													
Microprocessor check	YES													
<b>ENVIRONMENT</b>														
Working temp.	-15°C ~ +45°C													
Working humidity	20 ~ 90% RH non-condensing													
Storage temp., Humidity	-30°C ~ +70°C (-22°F ~ +158°F) , 10 ~ 95% RH													
Temp. Coefficient	±0.05%/°C (0 ~ 50°C)													
<b>SIZE</b>														
Dimension (L x W x H)	335 x 142 x 72mm													
Weight	3.5kgs													

## Multistage Battery Charger

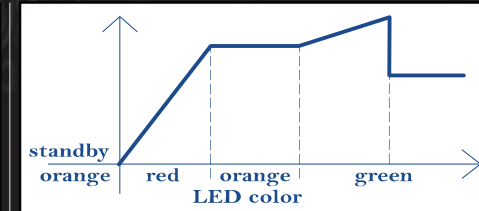
- PFC function. -- (Except HT-C-15L-12;HT-C-7L-24.)
- Sleeping mode function.
- Wide input voltage (universal) range operation. -- (Except HT-C-15L-12;HT-C-7L-24.)
- LCD remote control.
- Battery temperature sensor function.
- Tri-LED color indicator for different charge stage.
- Adjustable switch for different lead-acid battery types.
- Prevent the battery overcharging, and extend the battery life.
- For recovery of the aging (sulfated) battery.

### Charging volt graph (0: OFF)

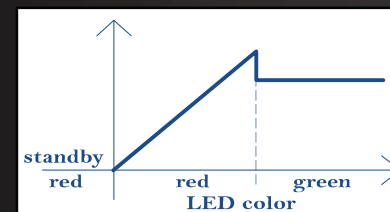


**Mode 1: (100)**  
For lead storage battery.

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

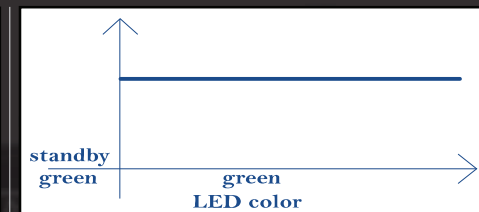


**Mode 3: (003)**  
Suitable for re-charging lead storage battery, which is in good condition battery and completely disconnected from the devices it runs.



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

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



**Mode 6: (123)**  
DC power supply.  
12.2V (for 12V spec.) / 24.5V (for 24V spec.)

**Mode 7: (000)**  
DC power supply.  
13.5V (for 12V spec.) / 27V (for 24V spec.)

Socket Type:



EUROPEAN



Made in Taiwan