TRC Technology
PURE ENERGY SOLUTIONS

High Frequency Chargers

Technical Specification
TRC 48V 20A PFC



	Item	Technical specification	Remark
1	Rated input voltage	100 -240 VAC +/-10%, stepless change	
2	AC frequency	50-60Hz	
3	Peak efficiency	91%@230VAC/48VDC, 89%@120VAC/48VDC	
4	Power factor	＞0.98 @ 230VAC, ＞0.99 @ 120VAC	Advanced Active PFC
5	Nominal output voltage	48V	
6	Bulk charge (CC)	20A, switch to CV at 28.8V (2.40vpc)	Constant Current
7	Absorption charge (CV)	28.8V (2.40vpc at battery end), switch to float charge when current tapers down to 1.5A	Constant Voltage
8	Float charge	27V (2.25vpc), no time limit	Constant Voltage
9	Interlock function	Normally-closed (NC), max. 7A Wires: 2 * 1mm² * 20cm, Red and Black Connector: customizable	Optional, customizable
10	Remote LED extension	Connector customizable	Optional, customizable
11	Charge algorithms	1#  IUIa-Acd for Wet traction batteries 2#  IUIa-GEL for Gel or AGM **3#**  **IUUa-GEL for Gel or AGM (default)** 4#  LiFePo4	Take out the cap near LEDs, Set charging profile by the left pair dip-switches 
12	Line loss compensation	Based on 2 meters output cable's length	
13	Short circuit protection	Short circuit protection with auto-reset	
14	Reverse polarity protection	Reverse polarity protection with auto-reset	

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15	Additional protection	Sparks protection AC surge protection with auto-reset Over temperature protection with auto-reset	
16	DC output power cord (customizable)	Cable: 2 * 4mm² * 1200mm Connector: customizable	
17	AC input power cord (customizable)	Cable: 3 * 1.5mm² * 600mm Connector: IEC320 / C14	
18	LED instruction	Red: On = Fault Yellow: On=Charging Green: On=Fully charged	Customizable
19	Regulatory compliant	Safety (LVD): EN60335-2-29, UL1564, CSA 107.2 Emissions (EMC): EN55014 Immunity (EMC): EN61000-3-2, EN61000-3-3	LVD, RE, CE, Harmonic, Flicker, ESD, RS, CS, EFT, Surge, DIP, PFM included
20	Cooling method	Fan-cooling with long-life fans	
21	Operating temperature	-10℃ to +50℃ (14℉ to 122℉)	
22	Storage temperature	-20℃ to +65℃ (-4℉ to 149℉)	
23	Mechanical fixing	On-board as default	Portable as optional
24	Dimensions	L286 x W134 x H77 mm	
25	Weight	3.2Kg	
26	Color	Black	

Applicable battery capacities （in C20 lead-acid types assuming full stages charging）		
Model	**TRC 48V 20A PFC**	
Charging time 8h from DOD 100%	Charging time 4-5h from DOD 50%	60Ah
Charging time 10h from DOD 100% with 0.2C	Charging time 5-6h from DOD 50% with 0.2C	110Ah
Charging time 12h from DOD 100% with 0.14C	Charging time 6-7h from DOD 50% with 0.14C	150Ah
Charging time 15h from DOD 100% with 0.1C	Charging time 7-8h from DOD 50% with 0.1C	240Ah
Recommended range of battery capacity	**100 - 240Ah**	

PRODUCT DRAWING

