



solaire
A Lagnuvo Initiative

TSYS-HR76 (7.6KWH)

49.9kW/50kW/60kW/61kW
38.4kWh-215kWh

Solaire Split C&I Energy Storage Solution

Global: +254 716 506554 / +254 738 926668

 www.solairerafrica.com

 info@solairerafrica.com

TSYS-HR76

Overview

Delivers sustained 1C performance
Embedded installation design for rapid deployment
Modular architecture for streamlined maintenance

Intelligence

Automated charge/discharge management
Multi-level protection: overcharge, over-discharge, thermal extremes

Reliability

High-safety LFP battery
Extended cycle life for long-term performance

Flexible Configuration

Scalable battery cluster (5–14 modules per set)
Remote firmware upgrade support
Full compatibility with Solaire inverters



SYSTEM SPECIFICATION

SYS modle name	T-HR38.4 T-HR38.4P ②	T-HR46.0 T-HR46.0P	T-HR53.7 T-HR53.7P	T-HR61.4 T-HR61.4P	T-HR69.2 T-HR69.2P	T-HR76.8 T-HR76.8P	T-HR84.4 T-HR84.4P	T-HR92.1 T-HR92.1P	T-HR99.8 T-HR99.8P	T-HR107.5 T-HR107.5P
Module quantities	5	6	7	8	9	10	11	12	13	14
Nominal energy	38.4 kWh	46.0 kWh	53.7 kWh	61.4 kWh	69.1 kWh	76.8 kWh	84.4 kWh	92.1 kWh	99.8 kWh	107.5 kWh
Usable energy (90%DOD)	34.5 kWh	41.4 kWh	48.3 kWh	55.2 kWh	62.2 kWh	69.1 kWh	76.0 kWh	82.9 kWh	89.8 kWh	96.7 kWh
Nominal voltage	256.0 V	307.2 V	358.4 V	409.6 V	460.8 V	512.0 V	563.2 V	614.4 V	665.6 V	716.8 V
Operating voltage range	200 ~ 292 V	240 ~ 350.4 V	280 ~ 408.8 V	320 ~ 467.2 V	360 ~ 525.6 V	400 ~ 584 V	440 ~ 642.4 V	480 ~ 700.8 V	520 ~ 759.2 V	560 ~ 817.6 V
Recommended charge / discharge current ^①	90 A									
Max. charge / discharge current ^①	150 A									
Rated power	23.0 kW	27.6 kW	32.2 kW	36.8 kW	41.4 kW	46.0 kW	50.6 kW	55.2 kW	59.8 kW	64.5 kW

BATTERY MODULE

Battery model	TB-HR76
Nominal energy	7.68 kWh
Nominal voltage	51.2 V
Rated capacity	150 Ah
Cycle life (90% DOD)	≥ 6000 (@25°C ± 2°C, 0.5C / 0.5C, 70%EOL)
Battery type	LFP
Dimensions (W x H x D)	450 × 170 × 580 mm
Weight	60 kg

BMS

BMS model	TBMS-R76
Dimensions (W x H x D)	450 × 180 × 580 mm
Net weight	19.2 kg

RACK

Dimensions (W x H x D)	530 x 1800 x 600 mm	1110 x 1800 x 600 mm
Weight	38.5 kg	77 kg

GENERAL

Battery roundtrip efficiency (0.5C / 0.5C, 25°C)	95%
Operating temperature range ^①	0 ~ 55°C (charge) -20 ~ 55°C (discharge)
Communication interface	CAN
Installation type	Rack mounting
Relative humidity	5 ~ 85%
Max.operating altitude	3000 m
Environment	Indoor
Safety	IEC 62619, IEC 60730, IEC 63056, IEC 61000
Transport testing requirement	UN38.3

① The current is affected by temperature and SOC.

② The models with "P" are battery systems delivered with rack protection cover