

WTS

CORE Series

Datasheet-V1.0



WTS CORE series, sparkling with innovation, provides you with intelligent integration storage solutions. This series has 2 platforms including low voltage and high voltage. There are 2 models under high voltage platform, which are WTS Power-CORE 1.0 and WTS Energy-CORE 1.0. WTS Power-CORE 1.0 is a power type with a capacity of 2.76kWh, 102.4 V in each battery stack. WTS Energy-CORE 1.0 is an energy type with a capacity of 3.2kWh, 64 V in each battery stack. Both of them can handle up to a voltage of 600V sharing our minted Smart BMS 1.0.

Smart BMS 2.0 will be released to support Modbus TCP/IP. BMS 2.0 will boost up the threshold of protection voltage up to 1000V for small C&I energy storage systems.

Core series will inaugurate a new era in the residential energy storage industry.



System Matrix

	Smart BMS 1.0	Smart BMS 2.0
Voltage Range	120~600 V	240~1000 V
Communication	CAN 2.0 / RS485	CAN2.0 / RS485 / Modbus TCP/IP
WTS Power-CORE 1.0	2 TO 5 Stacks	3 To 8 Stacks
WTS Energy-CORE 1.0	3 TO 8 Stacks	5 To 13 Stacks

SPECIFICATIONS

Supported by Smart BMS 1.0

Smart System Design



- LFP Chemistry
- Automatic Inverter Configuration (set-up free)
- Automatic Battery System Configuration (set-up free)
- Intelligent Display (Key Info, Err code, SOC)
- Power-CORE 1.0 and Energy-CORE 1.0 for all applications
- 1 and 3 phase, on / off grid / back up support
- No DC/DC, high efficiency system layout
- Up to 6 towers in parallel

Smart Installation Design



- Stackable Design, Easy Installation, $\leq 36.5\text{kg/ Stack}$
- Slim and Compact
- Plug-Play (Direct Connect RJ45)
- VDE2510 Compliances
- Aluminum Housing
- IP65 Protection

SPECIFICATIONS

Supported by Smart BMS 1.0

Smart BMS 1.0

ITEM	PARAMETER
Operating Voltage Range	120~600 V
Max Output Current	30 A
Peak Output Current	50 A (5s)
Communication	CAN 2.0 / RS485
Dimensions (H/W/D)	175 * 650 *260 mm
Weight	≤20 kg

SPECIFICATIONS

Supported by Smart BMS 1.0

Battery Stack

ITEM	PARAMETER	
	WTS POWER-CORE 1.0	WTS ENERGY-CORE 1.0
TYPE		
Battery Cell Technology	LFP	LFP
Operation Temperature	-10 ~ 55 °C	-10 ~ 55 °C
Usable Energy	2.76 kWh	3.2 kWh
Nominal Voltage	102.4 V	64 V
Operating Voltage Range	86.4~116.8V	54~73 V
Max Output Current	25 A	30 A
Peak Output Current	50 A (5s)	50 A (5s)
Dimensions (H/W/D)	175 * 650 *260 mm	175 * 650 *260 mm
Weight	≤35kg	≤36.5kg

SPECIFICATIONS

Supported by Smart BMS 1.0

WTS Power-CORE 1.0



Number of Stacks	2	3	4	5
Usable Energy	5.52 kWh	8.28 kWh	11.04 kWh	13.80 kWh
Max Output Current	25 A	25 A	25 A	25 A
Peak Output Current	50 A (5s)	50 A (5s)	50 A (5s)	50 A (5s)
Nominal Voltage	204.8 V	307.2 V	409.6 V	512 V
Operating Voltage Range	172.8~233.6 V	259.2~350.4 V	345.6~467.2 V	432~584 V
Dimensions (H*W*D) (mm)	625* 650 *260	800* 650 *260	975* 650 *260	1150* 650 *260
Weight	90 kg	125 kg	160 kg	195 kg

SPECIFICATIONS

Supported by Smart BMS 1.0

WTS Energy-CORE 1.0



Number of Stacks	3	4	5	6	7	8
Usable Energy	9.6 kWh	12.8 kWh	16.0 kWh	19.2 kWh	22.4 kWh	25.6 kWh
Max Output Current	30 A	30 A	30 A	30 A	30 A	30 A
Peak Output Current	50 A (5s)	50 A (5s)	50 A (5s)	50 A (5s)	50 A (5s)	50 A (5s)
Nominal Voltage	192 V	256 V	320 V	384 V	448 V	512 V
Operating Voltage Range	162~219 V	216~292 V	270~365 V	324~438 V	378~511 V	432~584 V
Dimensions (H*W*D)	800* 650 *260 mm	975* 650 *260 mm	1150* 650 *260 mm	1325* 650 *260 mm	1500* 650 *260 mm	1675* 650 *260 mm
Weight	129.5 kg	166 kg	202.5 kg	239 kg	275.5 kg	312 kg

GENERAL PARAMETERS

Operation Temperature	-10 ~ 55 °C
Protection Rating	IP65
Round-trip Efficiency	≥96%
Certification & Compliance	VDE2510-50 / IEC62619 / CEC / CE / UN38.3
Applications	ON Grid /ON Grid Backup/OFF Grid
Warranty	10 Years