

WTS Core series Datasheet



WTS CORE series, sparkling with innovation, provides you 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 power type with capacity 2.76kWh, 102.4 V in each battery stack. WTS Energy-CORE 1.0 is energy type with capacity 3.2kWh, 64 V in each battery stack. Both of them can handle up to voltage of 600V sharing the 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 system.

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



System Matrix

	Smart BMS 1.0	Smart BMS 2.0
Voltage Range	120-600 V	240-1000 V
Communication	CAN2.0 / 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)
- WTS Power-CORE 1.0 and WTS Energy-CORE 1.0 for all applications
- 1 and 3 phase, on/ off grid/ back up support
- No DC/DC, high efficiency system layout

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
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	80-116.8 V	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	≤35kg

SPECIFICATIONS

Supported by Smart BMS 1.0

WTS Power-CORE 1.0



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

SPECIFICATIONS

Supported by Smart BMS 1.0

WTS Energy-CORE 1.0



Number of Stacks	3	4	5	6	7	8
Usable Energy (kWh)	9.6	12.8	16.0	19.2	22.4	25.6
Max Output Current (A)	30 A	30 A	30 A	30 A	30 A	30 A
Peak Output Current (A)	50 A (5s)	50 A (5s)	50 A (5s)	50 A (5s)	50 A (5s)	50 A (5s)
Nominal Voltage (V)	192	256	320	384	448	512
Operating Voltage Range (V)	162~219	216~292	270~365	324~438	378~511	432~584
Dimensions (H) (mm)	800* 650 *260	975* 650 *260	1150* 650 *260	1325* 650 *260	1500* 650 *260	1675* 650 *260
Weight (kg)	129.5	165	202.5	239	275.5	312

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