

# VEKTOR Standalone UPS DTS-(S/H) Series

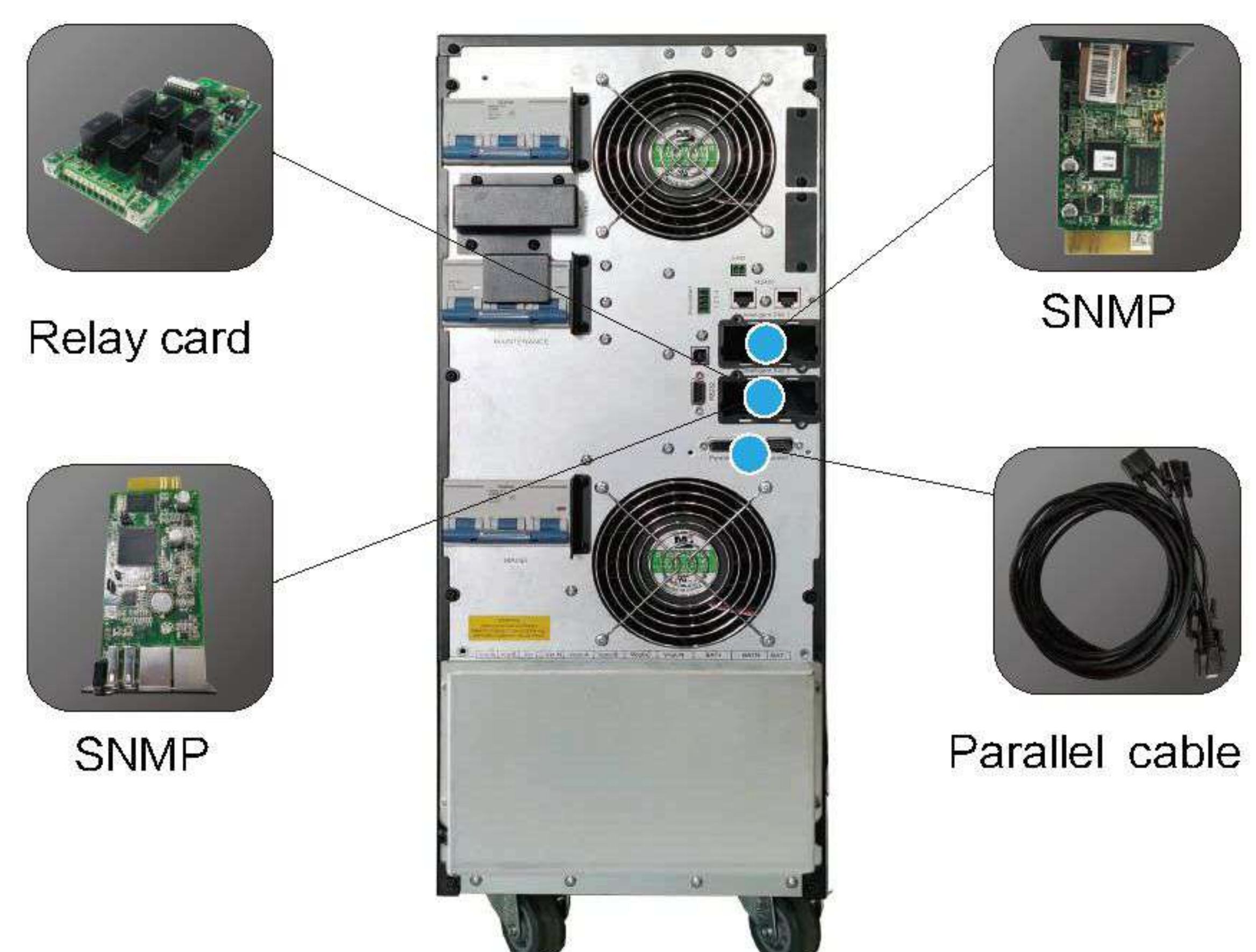
3:3 phase PF 0.9 (PF 1.0 optional)

Power range: 10kVA ~ 40kVA



## Features

- High power density design
- N+X parallel redundancy, support maximum 4 units in parallel
- Online double conversion with DSP control
- Input current harmonic: < 3%
- Wide input voltage range: 208~478Vac
- Wide input frequency range 40~70Hz
- Optimization battery group, the quantity of battery  
10~30kVA: 16/18/20pcs (30~50pcs supportable)  
40kVA: 30~50pcs
- Maximum charging current up to 20A (Settable)
- Dual input source (Optional for standard unit)
- Colorful 2.4 inch TFT LCD display and 7 inch LCD display LCD are optional
- Versatile LCD human-computer interface
- Generator compatible
- ECO mode operation for energy saving
- Intelligent fan speed regulation
- Self-testing when UPS startup
- 50/60Hz frequency converter mode
- Cold start
- The output can meet 100% unbalanced load
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and overdischarge, output low voltage and fan fault alarm
- Multiple communication interface: USB, RS232, RS485, Parallel port, Dry contact, Intelligent slot, SNMP card (Optional), Relay card (Optional), Battery temperature sensor (Optional)



# Technical Specifications

| MODEL    | DTS-(S/H) 10 kVA | DTS-(S/H) 15 kVA | DTS-(S/H) 20 kVA | DTS-(S/H) 30 kVA | DTS-(S/H) 40 kVA |
|----------|------------------|------------------|------------------|------------------|------------------|
| Capacity | 10kVA/9kW        | 15kVA/13.5kW     | 20kVA/18kW       | 30kVA/27kW       | 40kVA/36kW       |
|          | 10kVA/10kW       | 15kVA/15kW       | 20kVA/20kW       | 30kVA/30kW       | 40kVA/40kW       |

## INPUT

|                            |                                                                                                                                                                  |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal voltage            | 380/400/415Vac (3Ph+N+PE)                                                                                                                                        |
| Operating voltage range    | 305 ~ 478Vac (Full load); 208 ~ 478Vac (50% load)                                                                                                                |
| Operating frequency range  | 40 ~ 70Hz (50/60Hz Auto-Sensing)                                                                                                                                 |
| Power factor               | ≥0.99                                                                                                                                                            |
| Bypass voltage range       | Max.voltage: 220V: +25% (Optional +10%, +15%, +20%)<br>230V: +20% (Optional +10%, +15%)<br>240V: +15% (Optional +10%)<br>Min.voltage: -45% (Optional -20%, -30%) |
| Frequency protection range | 50/60Hz ±10%                                                                                                                                                     |
| ECO range                  | Same as bypass                                                                                                                                                   |
| Harmonic distortion (THDi) | ≤3% Linear load                                                                                                                                                  |

## OUTPUT

|                            |                    |                                                                         |
|----------------------------|--------------------|-------------------------------------------------------------------------|
| Output voltage             |                    | 380/400/415Vac (3Ph+N+PE)                                               |
| Voltage regulation         |                    | ± 1%                                                                    |
| Power factor               |                    | 0.9                                                                     |
| Output frequency           | Line mode          | ± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency (Optional)         |
|                            | Bat. mode          | 50/60 ( ± 0.1%)Hz                                                       |
| Transfer time              | AC mode to Batmode | 0ms                                                                     |
|                            | Inverter to Bypass | 0ms                                                                     |
| Output waveform            |                    | Pure Sinewave                                                           |
| Crest factor               |                    | 3:1                                                                     |
| Harmonic distortion (THDv) |                    | ≦2% Linear load<br>≦5% Non linear load                                  |
| Overload                   | AC mode            | ≦110% 60min, ≦125% 10min, ≦150% 1min, > 150% immediately turn to bypass |
|                            | Bat.mode           | ≦110% 10min, ≦125% 1min, ≦150% 5s, > 150% immediately shut down         |

## EFFICIENCY

|            |             |             |
|------------|-------------|-------------|
| Efficiency | Up to 93.5% | Up to 94.5% |
|------------|-------------|-------------|

## BATTERY

|                 |               |                                                                                                                                                                                       |                                                                |                                                |                                                                                                          |
|-----------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Battery voltage | Standard unit | Chassis 1: ±120Vdc (20pcs 9Ah)<br>(20pcs 7Ah, 2×20pcs 7/9Ah,<br>3×20pcs 7/9Ah optional)<br>Chassis 2: ±96Vdc (16pcs 9Ah)                                                              | ±120Vdc (2×20pcs 9Ah)<br>(2×20pcs 7Ah, 3×20pcs 7/9Ah optional) | ±120Vdc(3×20pcs 9Ah)<br>(3×20pcs 7Ah optional) | ±180Vdc(2×30pcs 9Ah)<br>(2×30pcs 7Ah optional)                                                           |
|                 | Long run unit | 10~30kVA: ±96/108/120Vdc; battery quantity (16~20pcs, 16pcs default, Standard unit and 20pcs no power derating; 18pcs output power factor 0.8/0.9; 16pcs output power factor 0.7/0.8) |                                                                |                                                | 40kVA: ±180/192/204/216/<br>228/240/252/264/276/288/<br>300Vdc (30/32/34/36/38/40/<br>42/44/46/48/50pcs) |
|                 |               | ±180/192/204/216/228/240/252/264/276/288/300Vdc<br>(30/32/34/36/38/40/42/44/46/48/50pcs supportable)                                                                                  |                                                                |                                                |                                                                                                          |
| Charge Current  | Standard unit | 1.35A<br>(2.7A optional)                                                                                                                                                              | 2.7A                                                           | 4.05A                                          | 2.7A                                                                                                     |
|                 | Long run unit | 14A (Max. )                                                                                                                                                                           | 16A (Max.)                                                     | 18A (Max.)                                     | 20A (Max.)                                                                                               |

## PHYSICAL

|                    |               |                                                              |                       |                       |                       |                       |
|--------------------|---------------|--------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Dimension<br>W×D×H | Standard unit | Chassis 1: 250 × 900 × 868mm<br>Chassis 2: 250 × 645 × 715mm |                       |                       |                       |                       |
|                    | Long run unit | 250 × 580 × 655mm                                            |                       |                       |                       |                       |
| Net weight         | Standard unit | Chassis 1: 129kg (20pcs 9Ah)<br>Chassis 2: 80kg (16pcs 9Ah)  | 186kg (2 × 20pcs 9Ah) | 187kg (2 × 20pcs 9Ah) | 236kg (3 × 20pcs 9Ah) | 239kg (2 × 30pcs 9Ah) |
|                    | Long run unit | 35kg                                                         | 39kg                  | 40kg                  | 43kg                  | 46kg                  |

## ENVIRONMENTAL

|                       |                                      |       |       |       |
|-----------------------|--------------------------------------|-------|-------|-------|
| Operating temperature | 0 ~ 40℃                              |       |       |       |
| Storage temperature   | -25 ~ 55℃ (No battery)               |       |       |       |
| Humidity range        | 0 ~ 95% (Non condensing)             |       |       |       |
| Altitude              | <1500m, derating required when>1500m |       |       |       |
| Noise level           | <55dB                                | <58dB | <61dB | <64dB |

## STANDARDS

|        |                                                                                                                                          |
|--------|------------------------------------------------------------------------------------------------------------------------------------------|
| Safety | IEC/EN 62040-1, IEC/EN 62477-1                                                                                                           |
| EMC    | IEC/EN 62040-2 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2) |

1. Specifications are subject to change without prior notice  
2. Data above are typical values for reference only, not as a basis for engineering design



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BT 10–40kVA battery pack specification

| MODEL                           | RSP BT40120N                                                     | DTS20 BT80120N | DTS30 BT80120N                 | DTS40 BT60180N | DTS40 BT80240N |
|---------------------------------|------------------------------------------------------------------|----------------|--------------------------------|----------------|----------------|
| BATTERY SYSTEM                  |                                                                  |                |                                |                |                |
| Battery type                    | VRLA (Lead acid maintenance free battery)                        |                |                                |                |                |
| Typical battery recharging time | 6 ~ 8 hours (To 90% of full capacity)                            |                |                                |                |                |
| Typical battery life            | 3 ~ 5 years, depend on discharging cycle and ambient temperature |                |                                |                |                |
| System voltage                  | ± 120Vdc                                                         |                |                                | ± 180Vdc       | ± 240Vdc       |
| Battery quantity                | 2 × 20 PCS                                                       | 4 × 20 PCS     |                                | 2 × 30 PCS     | 2 × 40 PCS     |
| Capacity                        | 7Ah/9Ah (12V)                                                    |                |                                |                |                |
| PHYSICAL                        |                                                                  |                |                                |                |                |
| Dimension W × D × H             | 250 × 619 × 616mm(With wheel)                                    |                | 250 × 900 × 868mm (With wheel) |                |                |
| Net weight                      | 122kg/134kg                                                      | 244kg/265kg    |                                | 200kg/215kg    | 244kg/265kg    |
| ENVIRONMENT                     |                                                                  |                |                                |                |                |
| Safety                          | CE                                                               |                |                                |                |                |
| Operating environment           | 0℃ ~ 40℃                                                         |                |                                |                |                |
| Relative humidity               | 0 ~ 95% (Non condensing)                                         |                |                                |                |                |
| Noise level                     | < 40dB at 1 Meter                                                |                |                                |                |                |

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