

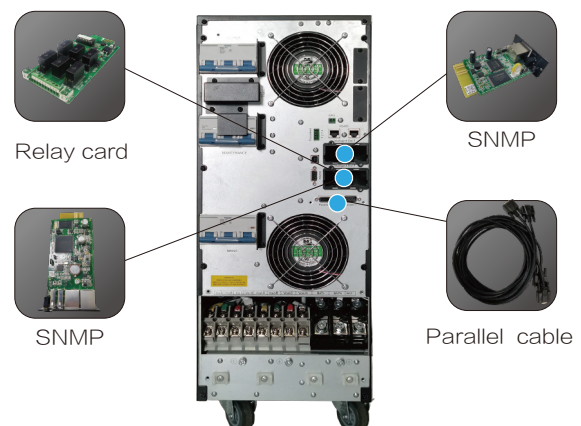
3:3 phase PF 0.9 (PF 1.0 optional)

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 is optional)
  - 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
- 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    | YDC3310S/H   | YDC3315S/H     | YDC3320S/H   | YDC3330S/H   | YDC3340S/H   |
|----------|--------------|----------------|--------------|--------------|--------------|
| 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%) |  |  |  |  |
|                            | 230V:+20% (Optional+10%,+15%)                  |  |  |  |  |
|                            | 240V:+15% (Optional+10%)                       |  |  |  |  |
|                            | 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                     | Line Mode           | ± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency (Optional)                        |
| Frequency                  | Bat. Mode           |                                                                                        |
|                            |                     | 50/60( ± 0.1%)Hz                                                                       |
| Transfer time              | AC mode to Bat.Mode | 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%,last 60min; ≤125%,last 10min; ≤150%,last 1min; > 150% turn to bypass Immediately |
|                            | Bat.mode            | ≤110%,last 10min; ≤125%,last 1min; ≤150%,last 5s; > 150% turn to bypass Immediately    |

### EFFICIENCY

|            |             |             |  |  |  |
|------------|-------------|-------------|--|--|--|
| Efficiency | up to 93.5% | up to 94.5% |  |  |  |
|------------|-------------|-------------|--|--|--|

### BATTERY

|                                                                                                |               |                                                                                                                                                                                                                                                                                                                    |                                                        |          |                                                           |                                                                                               |
|------------------------------------------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Battery voltage                                                                                | Standard unit | ± 120Vdc<br>(20pcs 12V9Ah);<br>(20pcs 12V7Ah、2x20pcs<br>12V7/9Ah optional)                                                                                                                                                                                                                                         | ± 120Vdc (2x20pcs 12V9Ah)<br>(2x20pcs 12V7Ah optional) |          | ± 120Vdc<br>(3x20pcs 12V9Ah)<br>(3x20pcs 12V7Ah optional) | ± 180Vdc<br>(2x30pcs 12V9Ah)<br>(2x30pcs 12V7Ah optional)                                     |
|                                                                                                | Long run unit | 10~30kVA: ± 96/108/120Vdc; battery quantity(16~20pcs, 16pcs default, Standard unit and 20pcs no power<br>derating;18pcs output power factor 0.8/0.9;16pcs output power factor 0.7/0.8;)<br>10~30kVA (Optional): ± 180/192/204/216/228/240/252/264/276/288/300Vdc<br>(30/32/34/36/38/40/42/44/46/48/50pcs optional) |                                                        |          |                                                           | 40kVA: ± 180/192/204/216/228/240/252/264/276/288/300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs ) |
| Charge Current<br>(charge current<br>can be set according<br>to battery capacity<br>installed) | Standard unit | 1.35A<br>(2.7Aoptional)                                                                                                                                                                                                                                                                                            | 2.7A                                                   |          | 4.05A                                                     | 2.7A                                                                                          |
|                                                                                                | Long run unit | 14A Max.                                                                                                                                                                                                                                                                                                           | 16A Max.                                               | 18A Max. | 20A Max.                                                  | 20A Max.                                                                                      |

### PHYSICAL

|                 |               |                 |        |        |        |        |
|-----------------|---------------|-----------------|--------|--------|--------|--------|
| Dimension       | Standard unit | 250 x 900 x 868 |        |        |        |        |
| W x D x H (mm)  | Long run unit | 250 x 580 x 655 |        |        |        |        |
| Net weight (kg) |               | 129/35          | 186/39 | 187/40 | 236/43 | 239/46 |

### 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/EN62040-1,IEC/EN62477-1                                                                 |  |  |  |  |
| EMC    | IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4,IEC61000-4-5,IEC61000-4-6,IEC61000-4-8 |  |  |  |  |

Specifications are subject to change without prior notice.

## BT 10–40kVA battery pack specification

| MODEL                           | MP31 BT40120N                                                 | YDC3320 BT80120N             | YDC3330 BT80120N | YDC3340 BT60180N | YDC3340 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 * ± 10 PCS                                                  | 4 * ± 10 PCS                 |                  | 2 * ± 15 PCS     | 2 * ± 20 PCS     |
| Capacity                        | 7Ah/9Ah (12V)                                                 |                              |                  |                  |                  |
| PHYSICAL                        |                                                               |                              |                  |                  |                  |
| Dimension W x D x H (mm)        | 250 x 619 x 616 (With wheel)                                  | 250 x 900 x 868 (With wheel) |                  |                  |                  |
| Net weight (kg)                 | 122/134                                                       | 244/265                      |                  | 200/215          | 244/265          |
| ENVIRONMENT                     |                                                               |                              |                  |                  |                  |
| Safety                          | CE                                                            |                              |                  |                  |                  |
| Operating environment           | 0℃~40℃                                                        |                              |                  |                  |                  |
| Relative humidity               | 0~95% (Non condensing)                                        |                              |                  |                  |                  |
| Noise level                     | <40dB at 1 Meter                                              |                              |                  |                  |                  |

Specifications are subject to change without prior notice.  
Remark: YDC3340 BT80240N "YDC3340" means series; "BT": means Battery Tower cabinet; "80" means battery number inside the cabinet; "240" means the battery system voltage; "N" means battery with neutral connection.

Mode: 3 phases input and 3 phases output

Power range: 50kVA~200kVA



## High reliability design

Wide input voltage range 138~485Vac (Phase voltage 80~280Vac), no derating when input voltage  $\geq$  305Vac.

## Power saving

High input power factor, it can be up to 0.99.

Three level inverter topology, the efficiency can be up to 96%.

## Parallel redundancy function

Support parallel expanded operation: maximum is 6 units.

Support sharing batteries for the UPS in parallel.

## Flexible battery configuration

Batteries number of each group can be selected from 30 pieces to 50 pieces.

Large charging current can meet the requirement of long time backup.

## Strong load capacity

Output power factor is 1.0, UPS can supply power to 100% unbalance load.

High adaptability for load, it can connect full inductive load or capacitive load.

## Compatible with generator

Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator.

## LBS function

LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system.

## Intelligent management

Support RS485, RS232, SNMP, dry contact card.

## Technical Specifications:

| MODEL               | YDC3350   | YDC3360   | YDC33100    | YDC33120    | YDC33150    | YDC33160    | YDC33180    |
|---------------------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|
| Capacity (VA/Watts) | 50k / 50k | 60k / 60k | 100k / 100k | 120k / 120k | 150k / 150k | 160k / 160k | 180k / 180k |

### INPUT

|                            |                                                                                                                                                                                                                                          |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal voltage            | 380/400/415Vac, (3Ph+N+PE)                                                                                                                                                                                                               |
| Operating voltage range    | 138~485Vac for 40%load; 305~485Vac for full-load                                                                                                                                                                                         |
| Operating frequency range  | 40~70Hz                                                                                                                                                                                                                                  |
| Power factor               | ≥ 0.99                                                                                                                                                                                                                                   |
| Harmonic distortion (THDi) | ≤ 3% (100% linear load )                                                                                                                                                                                                                 |
| Bypass voltage range       | 220Vac Max.voltage: +25%(optional +10%,+15%,+20% )<br>230Vac Max.voltage: +20%(optional +10%,+15% )<br>240Vac Max.voltage: +15%(optional +10% )<br>Min. voltage: -45% (optional -20%,-30%)<br>Frequency synchronize tracing range: ± 10% |
| Generator input            | Support                                                                                                                                                                                                                                  |

### OUTPUT

|                            |                                                                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output voltage             | 380/400/415Vac (3Ph+N+PE)                                                                                                                                       |
| Voltage regulation         | ± 1%                                                                                                                                                            |
| Power factor               | 0.9 & 1                                                                                                                                                         |
| Output frequency           | 1.Line Mode: synchronize with input; when input frequency > ± 10% ( ± 1%/ ± 2%/ ± 4%/ ± 5% optional), output (50/60 ± 0.1)Hz.<br>2.Battery Mode:(50/60 ± 0.1)Hz |
| Crest factor               | 3:1                                                                                                                                                             |
| Harmonic distortion (THDv) | ≤ 1% with linear load<br>≤ 4% with non linear load                                                                                                              |
| Efficiency                 | 96%                                                                                                                                                             |

### BATTERY

|                                                                                          |                                                                                                                                                                                                                                                                                                          |                 |                 |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|
| Battery voltage                                                                          | Optional Voltage: ± 180V/ ± 192V/ ± 204V/ ± 216V/ ± 228V/ ± 240/ ± 252/ ± 264/ ± 276/ ± 288/ ± 300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional); 360Vdc~600Vdc (30~50 pcs, 36 pcs default, 36 to 50 pcs output power factor 1.0; 32~34 pcs output power factor 0.9; 30 pcs output power factor 0.8;) |                 |                 |
| Charge Current(A)<br>(charge current can be set according to battery capacity installed) | Max.current 20A                                                                                                                                                                                                                                                                                          | Max.current 40A | Max.current 60A |

### SYSTEM FEATURES

|                     |             |                                                                                                               |
|---------------------|-------------|---------------------------------------------------------------------------------------------------------------|
| Transfer time       |             | Utility to Battery : 0ms; Utility to bypass: 0ms                                                              |
| Overload            | INV Mode    | 110% overload for 60 min; 125% overload for 10 min; 150% overload for 1 min                                   |
|                     | Bypass Mode | 135% overload for long time; >1000% overload for 100 ms                                                       |
| Backfeed protection |             | Support                                                                                                       |
| Alarm               |             | Overload, utility abnormal, UPS fault, battery low, etc.                                                      |
| Protection          |             | Short circuit, overload, over temperature, battery low, fan fault alarm.                                      |
| Remote LCD          |             | Support                                                                                                       |
| Communication       |             | USB, RS485, Parallel port, Coupler dry contact, Intelligent slot, SNMP card (optional), Relay card (optional) |

### ENVIRONMENTAL

|                       |                          |       |       |
|-----------------------|--------------------------|-------|-------|
| Operating temperature | 0°C ~ 40°C               |       |       |
| Storage temperature   | 25°C ~ 55°C(no battery)  |       |       |
| Humidity range        | 0 ~ 95% (non condensing) |       |       |
| Altitude              | < 1500m.When>1500m       |       |       |
| Noise level           | <55dB                    | <58dB | <60dB |

### PHYSICAL

|                          |             |              |
|--------------------------|-------------|--------------|
| Dimension D × W × H (mm) | 828x250x868 | 850x450x1200 |
| Net weight (kg)          | 80          | 83           |

### STANDARDS

|        |                                                                                             |  |  |
|--------|---------------------------------------------------------------------------------------------|--|--|
| Safety | IEC/EN62040-1,IEC/EN60950-1                                                                 |  |  |
| EMC    | IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4,IEC61000-4-5,IEC61000-4-6,IEC61000-4-8 |  |  |

Specifications subject to change without prior notice.

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