

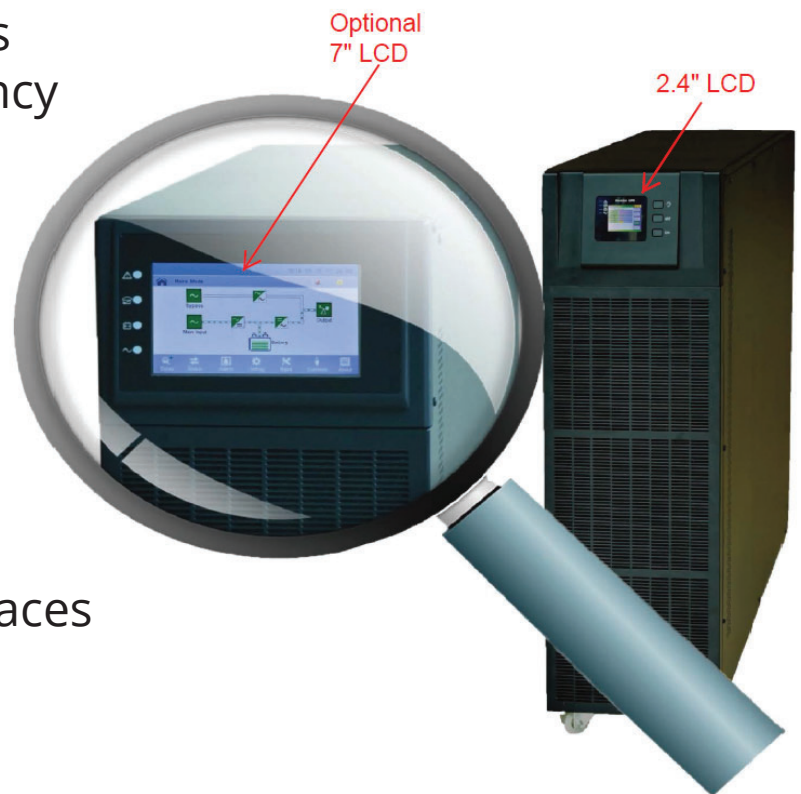


# **FORTRESS UPS**

**MOBILE TOWER UPS 10KVA-20KVA**

## FEATURES

- 10kVA, 15kVA, or 20kVA versions
- Parallel redundant up to 4 units
- Wide input voltage and frequency
- Unity Power Factor
- Low Input Distortion
- Output power factor of 1.0
- ECO mode operation
- Programmable battery voltage
- Built in battery pack
- Up to 94% efficiency
- 3 level intelligent charging
- Versatile communication interfaces
- Emergency Power Off
- DC Cold Start
- 2.4" or 7" LCD Monitor



The Fortress Series Tower is a 3 phase, 208V, parallel capable, fully redundant, true online, double-conversion UPS features a small footprint cabinet, built in batteries, DSP control, programmable battery voltage, 3 level intelligent charging, and a 2.4" or 7" LCD monitor.

Perfect for server rooms, banks, industrial equipment, telecommunications, IT equipment, and other mission critical electronics.

**Available in 10kVA, 15kVA and 20kVA versions.**

# SPECIFICATION

| Model                                | FSU3310S<br>FSU3310SD  | FSU3315S<br>FSU3315SD   | FSU3320S<br>FSU3320SD                                    |                  |                           |            |
|--------------------------------------|--|---|--|------------------|---------------------------|------------|
| <b>INPUT</b>                         |  |   |  |                  |                           |            |
| Nominal Voltage                      | 208 / 120v OR 220 / 127v, 50 / 60 Hz, 3-Phase, 4-Wire Plus Ground  |   |  |                  |                           |            |
| Operating Voltage Range              | +25%, -25% (96-150V or 102-159V) at Full Load ; -40%, +25% (72 - 150V or 76 - 159V) at < 50% Load  |   |  |                  |                           |            |
| Operating Frequency Range            | 40 - 70 Hz   |   |  |                  |                           |            |
| Power Factor (Full Load / Half Load) | 0.99 (40% Linear Load)   |   |  |                  |                           |            |
| Harmonic Distortion (THDi)           | < 2% (100% Linear Load)  |   |  |                  |                           |            |
| Bypass Voltage Range                 | Max. Voltage : +10, +15, +20 or + 25% (Default : +20)  |   |  |                  |                           |            |
| Generator Input                      | Support  |   |  |                  |                           |            |
| <b>OUTPUT</b>                        |  |   |  |                  |                           |            |
| Output Voltage                       | 208 / 120v OR 220 / 127v, 50 / 60 Hz, 3-Phase, 4-Wire Plus Ground  |   |  |                  |                           |            |
| Voltage Regulation                   | ± 1%   |   |  |                  |                           |            |
| Power Factor                         | 1  |   |  |                  |                           |            |
| Output Frequency                     | Line Mode : Synchronize With Input ; When Input Frequency > ± 10% (± 1% / ± 2% / ± 4% / ± 5 % opetional), Output (50 / 60 ± 0.1 %)Hz. Battery Mode : (50/60 ± 0.1 %)Hz |   |  |                  |                           |            |
| Crest Fator                          | 3:1  |   |  |                  |                           |            |
| Harmonic Distortion (THDi)           | < 1% With Linear Load < 3% With Non Linear Load  |   |  |                  |                           |            |
| Efficiency                           | Up to 94%  |   |  |                  |                           |            |
| <b>SYSTEM FEATURES</b>               |  |   |  |                  |                           |            |
| Transfer Time                        | Utility To Battery : 0ms ; Utility To Bypass : 0ms   |   |  |                  |                           |            |
| Overload                             | Line Mode  | Load ≤ 110% : Last 60 Min, ≤ 125 % : Last 10 Min, ≤ 150 % : Last 1Min , . 150% Change to Bypass Immediately |  |                  |                           |            |
|                                      | Bat. Mode  | Load ≤ 110 % : Last 10 Min, ≤ 125 % : Last 1 Min, ≤ 150 % : Last 5 S, > 150 % Shut Down UPS Immediately     |  |                  |                           |            |
|                                      | Bypass Mode  | Breaker 40 A  | Breaker 63A  | Breaker 80 A     |                           |            |
| Alarm                                | Overload, Utility Abnormal, UPS Fault, Battery Low, Etc.   |   |  |                  |                           |            |
| Protection                           | Short Circuit, Overload, Over Temperature, Battery Low, Fan Fault Alarm  |   |  |                  |                           |            |
| Communication                        | USB, RS485, Parallel Port, Coupler Dry Contact, Battery Temperature Sensor, Intelligent Slot For Optional SNMP Card, Relay Card  |   |  |                  |                           |            |
| <b>ENVIRONMENTAL</b>                 |  |   |  |                  |                           |            |
| Operating Temperature                | 0°C ~ 40° C  |   |  |                  |                           |            |
| Storage Temperature                  | -25° C ~ 55°C ( No Battery)  |   |  |                  |                           |            |
| Humidity Range                       | 0~90 % ( Non Condensing)   |   |  |                  |                           |            |
| Altitude                             | , 1500M. When . 1500m, Lower The Rates Power For Use   |   |  |                  |                           |            |
| Noise Level                          | <55dB For 1 M Distance   | < 58dB From 1M Distance   |  |                  |                           |            |
| <b>STANDARDS</b>                     |  |   |  |                  |                           |            |
| Safety                               | UL 1778, IEC/EN 62040-1, IEC/EN 60950-1  |   |  |                  |                           |            |
| EMC                                  | FCC Part 15:2015, IEC/EN 65040-2, IEC 61000-4-3, IEC61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC61000-4-8  |   |  |                  |                           |            |
| <b>STANDARD UNIT</b>                 |  |   |  |                  |                           |            |
| Model                                | Weight   | Dimension (WxHxD)   | Battery DC Voltage                                       | Built-in Charger | Built-in Battery Quantity | Max. Q'ty  |
| FSU3310S<br>FSU3310SD                | 136 kgs (299.8 lbs)  | 9.8" x 34.2" X 35.4"  | ± 120Vdc   | 1.35A            | 20 pcs 12V / 9AH          | 60         |
| FSU3315S<br>FSU3315SD                | 188 kgs (414.5lbs)   |   |  | 2.70A            | 40pcs 12V / 9 AH          | 60         |
| FSU3320S<br>FSU3320SD                | 239 kgs (526.9lbs)   |   |  | 4.05A            | 60 pcs 12V / 9AH          | 60         |
| <b>LONG BACKUP UNIT</b>              |  |   |  |                  |                           |            |
| FSULB3310H<br>FSULB3310HD            | 70 kgs (169.8lbs)  | 9.8" x 34.2" x 35.4"  | ± 96Vdc / ± 108Vdc /<br>± 120Vdc / ±132Vdc /<br>±144 Vdc | 20A              | N/A                       | N/A        |
| FSULB3315H<br>FSULB3315HD            | 78 kgs (172.0lbs)  |   |  |                  |                           |            |
| HSULB3320H<br>FSULB3320HD            | 79 kgs (174.2lbs)  |   |  |                  |                           |            |
| <b>MATCHING BATTERY PACK</b>         |  |   |  |                  |                           |            |
| Model                                | Weight   | Dimension (WxHxD)   |  |                  |                           |            |
| FSUBP800009-10                       | 260 kgs (573.2 lbs)  | 9.8" x 34.2" x 35.4"  |  |                  |                           |            |
| FSUBP800009-20                       | 261 kgs (575.4 lbs)  |   |  |                  |                           |            |
|                                      |  |   |  |                  |                           | For 10 K   |
|                                      |  |   |  |                  |                           | For 15/20K |

