RUFDIAMOND

# TERRA 166kVA

The Terra delivers comprehensive site power for diverse applications—from cranes and job trailers to forward operating bases. It can be seamlessly integrated with solar panels or paired with a fossil fuel-based generator to form a robust hybrid system. Alternatively, the Terra serves as an efficient battery backup solution for buildings, server rooms, signaling systems, and other mission-critical equipment. Engineered for maximum efficiency, these systems are designed to reduce fuel & operational costs by up to 90%.

## Key benefits

**All-In-One:**
Integrated battery system that is both solar & generator compatible. Optional trailer mount available.

**Parallel Capability:**
Connect up to 3 in parallel for up to 540 kWh.

**High Output:**
Up to 270 kVA peak output power.

**Rapid Deployment:**
Units can be easily transported via forklift & crane.

**Remote Monitoring & Management:**
24/7 via web portal.

**AC-Coupled Power System:**
Diesel GEN/PV System/Grid.

**Up to 90% on operational costs:**
When compared against fuel generators.




## Tech Specs

| | | | |
|---|---|---|---|
| **Power** | | | |
| **Rated Power** | 166 kVA | **Grid Frequency** | 60 Hz |
| **Max. Rated / Apparent Power** | 270 kVA | **AC Connection** | 3 W + N |
| **Rated Voltage** | 480 V* (±15%) | **THDI** | ≤ 3% |
| **Rated Current** | 375 A | **Power Factor** | -1 ~ +1 |
| **Solar** | | | |
| **Input Voltage** | 180 to 850V DC | **Input Current** | 36A x 24 |
| **PV Power** | 78 kW x 3 | | |
| **Battery Data** | | | |
| **Battery Chemistry** | LiFePO4 | **Nominal Charging Current** | 100 A |
| **Nominal Energy** | 180 kWh | **Nominal Discharging Current** | 200 A |
| **Working Voltage Range** | 600V ~ 876V | **Max. Discharging Current** | 300 A |
| **DOD** | 90% | | |
| **Compatible Diesel Generator** | | | |
| **Rated Power** | +10 kVA | **Rated Frequency** | 60 Hz |
| **Rated Voltage** | 480 V* | | |
| **General*** | | | |
| **Parallel Capable** | Yes (up to 3) | **System Noise** | <65 dB |
| **EMS** | SEMS3000 12 inch LCD Touch Panel | **Cooling** | Intelligent temperature control |
| **Ingress Rating** | IP54 / NEMA 3R | **Fire Suppression System** | Included |
| **Topology** | Transformer | **Altitude** | 5,000 (>3,000 derating) |
| **Working Temperature** | -30°C to 55°C [-22°F to 131°F] | **Certifications** | UL1973 / UL1741 / UL9540A / FCC Part 15 Class B / CUEN/ UN38.3 |
| **Storage Temperature** | -40°C to 65°C [-40°F to 149°F] | **Dimensions** | 8'W x 10' L x 9.5' H |
| **Relative Humidity** | 5 ~ 95% (No condensing) | **Weight** | 10,361.72 lbs (4,700 kg) |

Notes:

*Custom colour/co-branding available at an additional cost.

## Contact us

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