# HIPOWER®
## A YANMAR COMPANY

# EHR 20/20
## BATTERY POWER GENERATOR

**Zero Emissions
Zero Noise**

**PLUG & PLAY**

**PEAK SHAVING**

**LIGHT LOAD**

**LOAD SHARING**

**UPS**

**RENEWABLES INTEGRATION**

| GENERAL TECHNICAL DATA | | EHR 20/20 | EHR 20/40 |
|---|---|---|---|
| Nominal rated power | kVA | 20 | 20 |
| Nominal energy storage capacity | kWh | 21.3 | 42.6 |
| Rated voltage (60Hz) | VAC | 240/120V | |
| Maximum power input | A | 100 | |
| Maximum passthrough | A | 100 | |
| Operating temperature | ºF | 5 to 122 | |
| Protection | | Overload, Overheat, Short Circuit | |

| BATTERIES | | | |
|---|---|---|---|
| Quantity | Un | 6 | 12 |
| Type | | LFP (Lithium Iron Phosphate) | |
| Battery system voltage | VDC | 48 | |
| DoD % (depth of discharge) | | 90% | |
| Energy density | Wh/kg | 111 | |
| Overcurrent capability | | up to 2.5 x recommended current | |
| Lifetime (90% DoD) | Cycles | 6000 | |
| Battery management system | | LFP batteries with built-in BMS | |
| Maintenance charge cycle | | 1 week | |

| INVERTER | | | |
|---|---|---|---|
| Quantity | Un. | 2 | 2 |
| Total nominal power | kVA | 20 | 20 |
| Max. Charging current | A | 200 | |

| OVERLOAD | EHR 20/20 | EHR 20/40 |
|---|---|---|
| Peak power of 200% of the nominal power (short-circuit) | Not Available | 0.5 seconds |
| 150% of nominal power where the output voltage remains stable | Not Available | 5 seconds |
| 130% of nominal power where the output voltage remains stable | Not Available | 30 minutes |
| Start up current of loads (3 Phase motor) | Not Available | 3 x nominal current |

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| PERFORMANCE | | EHR 20/20 | EHR 20/40 |
|---|---|---|---|
| Recommended generator size | kVA | 25-80 **(60 kVA Min. for peak shaving)** | |
| Max outlet hybrid system | A | 183 | |
| **Recharging Time / Maintenance Time** | | | |
| Recharging time | h | 1.17 | 2.34 |
| Maintenance recharging (@DoD%) | h | 5.59 | 11.17 |
| **Discharging autonomy** | | | |
| 100% nominal power | h | 0.74 | 1.47 |
| 75% nominal power | h | 0.98 | 1.97 |
| 50% nominal power | h | 1.47 | 2.95 |
| 25% nominal power | h | 2.95 | 5.90 |
| **RENEWABLE ENERGY** | | | |
| MPPT | | 8 kW | 8kW |
| Overcurrent protections | h | SPD + MLCB | SPD + MLCB |
| Connectors | h | 6 Pair 30A - MC4 | 6 Pair 30A - MC4 |

| DIMENSIONS AND WEIGHT | | EHR 20/20 | EHR 20/40 |
|---|---|---|---|
| Dimensions (L x W x H) | in | 65 x 43.30 x 71 | |
| Dimensions  Trailer (L x W x H) | in | 128.3 x 74 x 97 | |
| Weight (Without Trailer) | lbs | 1508 | 2072 |



**20 ft**
8 units
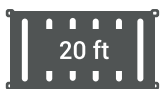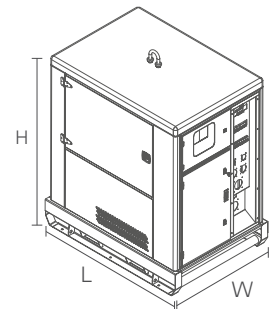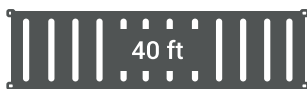
**40 ft**
16 units

## SCOPE OF SUPPLY

CANOPY
- Powder coating with primer coating according to HIPOWER SYSTEMS standards.

ACCESIBILITY
- Wide doors to check servicing and commisioning in customer interface.
- Cables entry

SECURITY
- Internal locker for batteries.
- Antitheft hinges and door lockers.
- Earth pin (grounding rod not included)

TRANSPORTABILITY
- Forklift pockets
- Lifting hook

## ADDITIONAL OPTIONS

- Custom colors.
- Custom sockets distribution (input and output)
- Galvanized baseframe
- Trailer

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# EHR
## BATTERY POWER GENERATOR

| CONTROL PANEL | |
|---|---|
| Model | **HICORE** \| Control module with TFT4.3" display and buttons |
| Remote generator start | Dry contact relay |
| Remote communication | 3G/4G Dual SIM modem / router. eHR Battery Power Box  Software / C2Cloud |
| Communication | Web APP |

# HICORE®
## HIPOWER SYSTEMS

HICORE guarantees the optimization of the different power sources by means of an interface that has been designed to provide a guided and simple experience for any operator, who will be able to choose the most appropriate working mode at any given moment. In addition, to ensure immediate start-up, we offer a Plug & Play mode which allows the EHR to automatically decide which is the best operational option at any given moment based on a constant analysis of the load profile and the connected sources.

Start ASSISTANT to set up a working mode or to charge the batteries.

**User experience**
Easy system configuration and handling. Smart guidance throughout the start-up process with a wizard, making it easy to operate the unit.

**Always connected**
Get all the performance info you need through C4CLOUD which comes pre-installed on the unit. Monitor, read and analyze all the performance and load profile information locally or remotely (4G) to optimize your site's power solution.
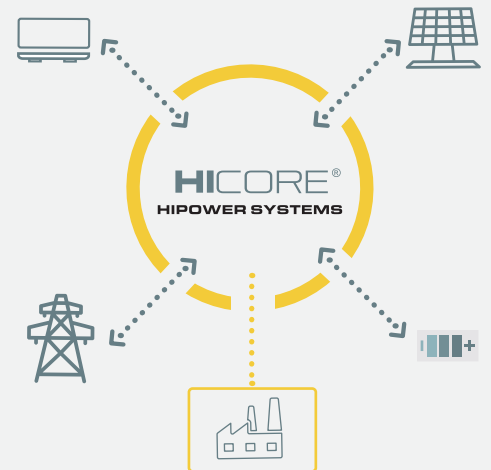
| SOCKETS OPTIONS | | 240/120V/60Hz/2p+N +E |
|---|---|---|
| | | V1 |
| IN | 120V 20A Waterproof Receptacle (HBL61CM64) | 1 |
| | 400A 4/0 Single Pin Male Camlocks | L1+ L2+N+E |
| OUT | 120V 20A Waterproof Receptacle (HBL61CM65) | 1 |
| | 240V 50A Waterproof Twist Lock Connector (CS6369) | 2 |
| | 400A 4/0 Single Pin Female Camlocks | L1+ L2+N+E |

Every socket include circuit breaker. Power Output protected by Earth Leakage Relay. Domestic sockets with ELR

Rev 5.

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