

InVerdē Ultra 100

Ultra-Low Emissions Inverter-Based Cogeneration

Key Features & Benefits

- 100 kW Continuous/125 kW Peaking
- **Delivers ultra-low emissions levels compliant with strict “CARB 2007” Standards**
- Standardized Interconnection
- Black-Start Grid-Independent Operation
- Microgrid compatible with licensed CERTS¹ power balancing control software
- Premium Quality Wave Form, Voltage and Power Factor for Special Applications
- Power Boost for Demand-Side Response
- Enhanced Efficiency from Variable Speed Operation
- Simplified Inter-Unit Controls for either Mode of Operation (parallel or standby)
- ETL Listed - Labeled for compliance with UL 1741 - Utility Interactive; Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources
- **Renewable Energy Compatible, a Clean Energy Solution for Today and Tomorrow**

¹CERTS - Consortium for Electric Reliability Technology Solutions



UL 1741
Compliant



NYSIR
Certified



- Over 25 years experience in packaged cogeneration, chillers and refrigeration systems
- More than 1,400 operating units in the field
- Extensive service network with factory-trained technicians exclusively servicing Tecogen products

Inverter-Based Cogeneration

Specifications: ¹

Engine	<i>Proven Low-Emission Natural Gas V-8 Engine, 454 cid, 1000-3000 rpm</i>
Generator	<i>Water-Cooled Permanent Magnet Generator</i>
Inverter	<i>Customized Power Electronics with Patented Topology for Variable Speed and Standby Operation</i>
Controls	<i>TecoNet™ Microprocessor-Based System, Fully Automatic, Fault Monitoring, Lead/Lag Multiple Unit Control, Modbus Networking & Remote Telecommunications</i>
Electric Output	100 kW Continuous / 125 kW Peaking ² 480 VAC / 3 PH / 60 Hz
Standalone Electric Capacity	125 kVA
Thermal Output	
Engine	670,000 Btu/hr @ 230°F Max
Generator/Power Electronics	27,000 Btu/hr @ 129°F Max
Electric Efficiency	
@ LHV of 905 Btu/scf	30.4%
@ HHV of 1020 Btu/scf	27.0%
System Efficiency ³	
@ LHV of 905 Btu/scf	90.2%
@ HHV of 1020 Btu/scf	80.0%
Gas Input	1238 scfh 1625 scfh Peaking
Required Gas Pressure	10-28" wc
Hot Water	30 gpm
Maximum Leaving Water Temperature	230 °F
Maximum Entering Water Temperature	180 °
Air Emissions (CARB 2007 Compliant)	
• NO _x	0.07 lb/MWh
• CO	0.10 lb/MWh
• VOC	0.02 lb/MWh
Weight	4,500 lb
Dimensions	7'4"L x 4'W x 5'9" H
ETL Listed - Labeled for compliance with UL 1741 - Utility Interactive; Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources	

1. All specifications are +/- 5% and are subject to change without notice.
2. Peaking capacity is available for 100 hours per year only when grid connected.
3. Includes engine heat recovery only (not generator/power electronics heat).
4. Above performance data is valid up to 104 °F ambient temperature

