

**Emergency Standby Power (ESP):**

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

**Prime Power (PRP):**

Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

**Continuous Power (COP):**

Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

POWERZOO generators are CE certified and conform to the following Directives:

- EN 12100: 2010, EN ISO 8528-13: 2016, EN 60204-1: 2018,
  - EN 61000-6-2: 2019, 2006/42/CE Machinery safety
  - 2014/35/EU Low voltage
  - 2014/30/EU Electromagnetic compatibility
  - Power according to ISO 8528 and ISO 3046
  - Ambient reference conditions 1000 mbar, 25° C, 30% relative humidity.
- Information based on standard specification equipment unless otherwise stated.

| GENERATOR MODEL |                          | W1750P5 |                        |
|-----------------|--------------------------|---------|------------------------|
|                 | Generator specifications | PRP     | ESP                    |
|                 | Power                    | kW/kVA  | 1400/1750<br>1520/1900 |
|                 | Rated speed              | r.p.m.  | 1500                   |
|                 | Available voltages       | V       | 380~415                |
|                 | Frequency                | Hz      | 50                     |
|                 | Phase                    |         | 3-PH                   |
|                 | Power factor             | Cos φ   | 0.8                    |
|                 | Fuel cons 100%           | L/H     | 367.2                  |
|                 | Starting power           | kW      | 2×8.5                  |
|                 | Recommended battery      | Ah      | 80                     |
|                 | Number of batteries      |         | 8                      |
|                 | Auxiliary voltage        | VDC     | 24V                    |



FREQUENCY



DIESEL FUEL



WATER-COOLED



SOUNDPROOF



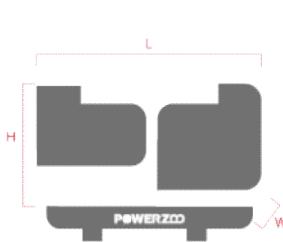
CERTIFICATION



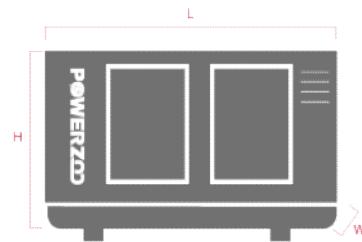
ISO 9001



STACKABLE

**Dimension and Weight**

Open Type



Silent Type

|  | DIMENSION  | OPEN TYPE | SILENT TYPE |
|--|------------|-----------|-------------|
|  | Length (L) | mm        | 5400        |
|  | Width (W)  | mm        | 2250        |
|  | Height (H) | mm        | 2500        |
|  | Dry weight | kg        | NA          |
|  | Fuel tank  | L         | NA          |

POWERZOO has the right to modify any feature without prior notice. Weights and dimensions based on standard products. Illustrations may include optional equipment. Technical data described in this catalogue correspond to the available information at the moment of printing. The illustrations and images are indicative and may not coincide in their entirety with the product. Industrial design under patent.



## Engine Specifications

| ENGINE                       | Weichai®                       | ENGINE                            | Weichai®   |
|------------------------------|--------------------------------|-----------------------------------|------------|
| Engine model                 | 16M33D1680E310                 | Total lubrication system capacity | 171 L      |
| Number of cylinders          | 16                             | Coolant capacity (engine only)    | 100 L      |
| Cylinder arrangement         | V-Type                         | Speed stability (%)               | ≤3%        |
| Cycle                        | Four stroke                    | Start type                        | Electrical |
| Aspiration                   | Turbocharging and intercooling | Maximum exhaust temperature       | 750°C      |
| Bore x Stroke                | 150x185 mm                     | Exhaust gas flow                  | 7852 kg/h  |
| Displacement                 | 52.3 L                         | Maximum allowed back pressure     | 7.1 kPa    |
| Compression ratio            | 15:1                           | Intake air flow                   | 7548 kg/h  |
| Prime power/Speed            | 1530/1500 (kW/rpm)             | Cooling air flow                  | TBD        |
| Standby power/Speed          | 1680/1500 (kW/rpm)             | Consumption @ 100% load ESP       | 403.92 L/H |
| Speed governor               | ECU                            | Consumption @ 100% load PRP       | 367.2 L/H  |
| Cooling system (open type)   | 40°C tropical radiator         | Consumption @ 75% load PRP        | 275.4 L/H  |
| Cooling system (silent type) | 50°C tropical radiator         | Consumption @ 50% load PRP        | 183.6 L/H  |

**Features:**

- Diesel engine
- 4-stroke cycle
- Water-cooled

- Dry air filter
- Radiator with pusher fan
- Moving parts protection
- Radiator water level sensor (Optional)
- 55 degree radiator (Optional)

- Jacket coolant heater (Optional)
- Lube oil heater (Optional)
- Engine filter heater (Optional)
- Fuel inlet line heater (Optional)
- Heavy duty air filter (Optional)



## Alternator Specification

| ALTERNATOR               | ALTERNATOR              |
|--------------------------|-------------------------|
| Exciter type             | Brushless, self-excited |
| Power factor             | 0.8                     |
| Voltage adjust range     | ≥5%                     |
| Voltage regulation NL-FL | ≤±1.0%                  |
| Insulation grade         | H                       |
| Protection grade         | IP23                    |

**Options:**

- AREP/PMG/EBS
- Air inlet filter (5% deration)
- Louver (5% deration)

- Space heater
- Digital AVR
- Severe environmental impregnation
- Stator sensor
- PT100

- Rotor sensor
- Double bearing
- Drip proof cover
- Terminal box IP44
- Double bearing



## Controller Brands

SmartGen

**SmartGen**

CamAp

**ComAp**

Deep Sea



DEIF



Woodward

**WOODWARD**

Datakorn

**DATAKOM**

## Controller Functions

| OPTIONAL CONFIGURATION            | Stand-alone Basic | Stand-alone Advanced | Synchronization Basic | Synchronization Advanced |
|-----------------------------------|-------------------|----------------------|-----------------------|--------------------------|
| Voltage between phases            | ●                 | ●                    | ●                     | ●                        |
| Voltage between neutral and phase | ●                 | ●                    | ●                     | ●                        |
| Current intensities               | ●                 | ●                    | ●                     | ●                        |
| Frequency                         | ●                 | ●                    | ●                     | ●                        |
| Apparent power (kVA)              | ●                 | ●                    | ●                     | ●                        |
| Active power (kW)                 | ●                 | ●                    | ●                     | ●                        |
| Reactive power (kVAr)             | ●                 | ●                    | ●                     | ●                        |
| Power factor                      | ●                 | ●                    | ●                     | ●                        |
| Coolant temperature               | ●                 | ●                    | ●                     | ●                        |
| Oil pressure                      | ●                 | ●                    | ●                     | ●                        |
| Battery voltage                   | ●                 | ●                    | ●                     | ●                        |
| R.P.M.                            | ●                 | ●                    | ●                     | ●                        |
| Battery charge alternator voltage | ●                 | ●                    | ●                     | ●                        |
| High water temperature by sensor  | ●                 | ●                    | ●                     | ●                        |
| Low oil pressure by sensor        | ●                 | ●                    | ●                     | ●                        |
| Unexpected shutdown               | ●                 | ●                    | ●                     | ●                        |
| Fuel storage by sensor            | ●                 | ●                    | ●                     | ●                        |
| Stop failure/Start failure        | ●                 | ●                    | ●                     | ●                        |
| Overspeed/Underspeed              | ●                 | ●                    | ●                     | ●                        |

● Standard ○ Optional

| OPTIONAL CONFIGURATION             | Stand-alone<br>Basic | Stand-alone<br>Advanced | Synchronization<br>Basic | Synchronization<br>Advanced |
|------------------------------------|----------------------|-------------------------|--------------------------|-----------------------------|
| Emergency stop                     | ●                    | ●                       | ●                        | ●                           |
| High/Low frequency                 | ●                    | ●                       | ●                        | ●                           |
| High/Low voltage                   | ●                    | ●                       | ●                        | ●                           |
| Short-circuit                      | ●                    | ●                       | ●                        | ●                           |
| Incorrect phase sequence           | ●                    | ●                       | ●                        | ●                           |
| Inverse power                      | ●                    | ●                       | ●                        | ●                           |
| Overload                           | ●                    | ●                       | ●                        | ●                           |
| Total hour counter                 | ●                    | ●                       | ●                        | ●                           |
| Kilowatt meter                     | ●                    | ●                       | ●                        | ●                           |
| Starts valid counters              | ●                    | ●                       | ●                        | ●                           |
| Maintenance                        | ●                    | ●                       | ●                        | ●                           |
| USB                                | ●                    | ●                       | ●                        | ●                           |
| Software for PC                    | ●                    | ●                       | ●                        | ●                           |
| Alarm history                      | ●                    | ●                       | ●                        | ●                           |
| External start                     | ●                    | ●                       | ●                        | ●                           |
| Start inhibition                   | ●                    | ●                       | ●                        | ●                           |
| Mains failure start                | ●                    | ●                       | ●                        | ●                           |
| Pre-heating engine control         | ●                    | ●                       | ●                        | ●                           |
| Fuel transfer control              | ●                    | ●                       | ●                        | ●                           |
| Engine temperature control         | ●                    | ●                       | ●                        | ●                           |
| Programmable alarms                | ●                    | ●                       | ●                        | ●                           |
| Genset start function in test mode | ●                    | ●                       | ●                        | ●                           |
| Programmable outputs               | ●                    | ●                       | ●                        | ●                           |
| Multilingual                       | ●                    | ●                       | ●                        | ●                           |
| RS485                              |                      | ●                       | ●                        | ●                           |
| Modbus IP                          |                      | ●                       | ●                        | ●                           |
| J1939                              |                      | ●                       | ●                        | ●                           |
| Synchronization                    |                      |                         | ●                        | ●                           |
| Mains synchronization              |                      |                         |                          | ●                           |
| Fuel level (%)                     | ○                    | ○                       | ○                        | ○                           |
| Low water level                    | ○                    | ○                       | ○                        | ○                           |
| GSM/GPRS modem                     | ○                    | ○                       | ○                        | ○                           |
| Remote screen                      | ○                    | ○                       | ○                        | ○                           |

● Standard ○ Optional