

## Diesel Generator Set KD 1500 O&M

### Description

This Katana® Power Generation commercial generator set is a fully integrated power generation system, providing optimum performance, reliability, and versatility for stationary standby, prime power and continuous duty applications.

### Features

**Katana® heavy-duty engine** - Rugged 4-cycle industrial diesel delivers reliable power, low emissions and fast response to load changes.

**Alternator** - Low reactance 2/3 pitch windings; low waveform distortion with non-linear loads, fault clearing short-circuits capability, and class H insulation.

**Cooling system** - The standard integrated kit model radiator system designed and tested for nominal ambient temperatures, simplifies facility design requirements for heat rejected.

**Control system** – Datakom electronic control is standard equipment and provides total genset system integration, including auto remote start/stop, alarm and status message display.

**Canopy Types** - Optionally it is possible to make it protective and soundproof against adverse climatic conditions

**Warranty and service** - Backed by a comprehensive warranty and worldwide aftersales support, 10 years of spare parts supplying.

**Stand by Rating (ESP):** It is the way that generators operate under variable load at certain time intervals. It can work as a backup power. It is not suitable to work under extreme load.

**Prime Rating (PRP):** Applicable for supplying power to varying electrical load for unlimited hours. PRP is in accordance with ISO 8528. 10 % overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046.

Genset Model	Engine Model	Prime rating	Stand by rating	Max. kVA rating
KD 1500 O&M	OPE 30.2K4	1135 kVA	1305 kVA	1500 kVA

## Generator Set Specifications

Governor regulation class	ISO 8528 G3
Voltage regulation, no load to full load	± 1%
Random voltage variation	± 1%
Frequency regulation	Isochronous
Random frequency variation	± 0.25%
EMS compatibility	In compliance with BS 800 and VDE levels G and N

## Engine Specifications

Engine brand	Optimus Engine
Aspiration Type	Turbocharged
Engine Rated Speed	1500 rpm
Bore	138 mm
Stroke	168 mm
Displacement	30,15 L
Cylinder block	12 cylinder, vertical
Oil capacity	80 L
Cooling water	150 L
Starting voltage	24 V
Fuel system	Direct injection
Fuel filter	Strata pore fuel filter
Air cleaner type	Heavy duty air cleaner
Compression ratio	17:1
Cycle	4 stroke
Cooling system	Water cooled
Governor Type	Mechanical
Fuel Consumption at 50% of generator set prime output	123 L/hr
Fuel Consumption at 75% of generator set prime output	165 L/hr
Fuel Consumption at 100% of generator set prime output	260 L/hr
Fuel Consumption at 110% of generator set prime output	290 L/hr

## Alternator Specifications

Alternator brand	Megatron
Type	Brushless, revolving field
Frequency	50 Hz
Winding pitch	2/3 pitch
Number of bearing	Single bearing
Protection	IP23
Insulation system	Class H
Standard temperature rise	Standart 125°C ,Stand by 163°C
Exciter type	Self - excitation or other excitation by PMG
Phase rotation	A (U), B (V), C (W)
Alternator cooling	Direct drive centrifugal blower fan
AC waveform total harmonic distortion (THDV)	No load <1.5%. Non distorting balanced linear load <5%
Telephone influence factor (TIF)	<50% per NEMA MG1-22.43
Telephone harmonic factor (THF)	<2%

## Generator Set Options

### Engine

- Water jacket heater

### Cooling

- Antifreeze -25°

### Alternator

- H class insulation  
 Exciter voltage regulator

### Control panel

- Datakom  
 3 pole main circuit breaker  
 Motorised 4 pole circuit breaker

### Canopy Types

- Optional super silent

### Warranty

- Global warranty

## Control system

The new D300 MK2 genset controller is a cost effective modular genset controller ready for internet monitoring through plug-in modules.

Its main advantages are multifunctionality, support for multiple topologies, harmonic analysis and detailed power measurements.

## Description

Software features are complete with easy firmware upgrade through USB port.

The Windows based PC software allows monitoring and programming through USB, RS-485, RS-232, Ethernet and GPRS.

The Rainbow Scada web service allows monitoring and control of an unlimited number of gensets from a single central location

## Major features

- Diesel and gas genset support
- 400 Hz operation support
- 400 event logs, full snapshot
- All parameters front panel editable
- 3 level configuration password
- 128x64 graphical LCD display
- Downloadable languages
- Waveform display of V & I
- Harmonic analysis of V & I
- 16Amp MCB & GCB outputs
- 8 configurable digital inputs
- 6 configurable digital outputs
- 3 configurable analog inputs
- Both CANBUS-J1939 & MPU
- 3 configurable service alarms
- Multiple automatic exerciser
- Weekly operation schedule
- Dual mutual standby with equal aging of gensets
- Manual "speed fine adjust" on selected ECUs
- Automatic fuel pump control
- Disable protections feature
- Excess power protection
- Reverse power protection
- Overload IDMT protection
- Load shedding, dummy load
- Multiple load management
- Current unbalance protection
- Voltage unbalance protection
- Fuel filling & fuel theft alarms
- Battery back-up real time clock
- Idle speed control
- Battery charge run enabled
- Combat mode support
- Multiple nominal conditions
- Contactor & MCB drive
- 4 quadrant genset power counters
- Mains power counters
- Fuel filling counter
- Fuel consumption counter
- Modem diagnostics display
- Configurable through USB, RS-232 and GPRS
- Free configuration program
- Allows SMS controls

- Ready for central monitoring
- Mobile genset support
- Automatic GSM geo-location
- GPS connectivity (RS232)
- Easy USB firmware upgrade
- IP65 rating with optional gasket

## Functions

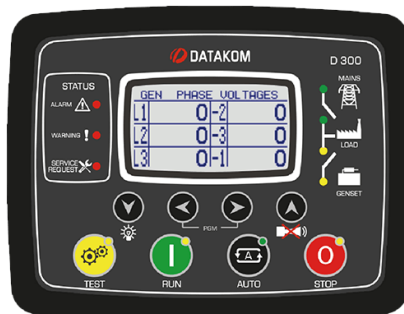
- AMF unit
- ATS unit
- Remote Start Controller
- Manual Start Controller
- Engine Controller
- Remote Display Panel

## Communications

- USB Device
- J1939-CANBUS
- Geo-locating through GSM
- Internet Central Monitoring
- SMS Message Sending
- E-mail Sending
- Free Pc Software: RainbowPlus
- Modbus RTU (2400-57600baud)
- Modbus TCP/IP
- HTML
- UDP

## Remote monitoring

- Single server supports up to 60'000 devices
- Provides data security, data is sent to only server
- Uses internet-based interactive World map
- Real time display of status of devices are shown on the map, and on side panel
- Hierarchical configuration and clustering
- Remote control of devices
- Supports all Datakom products, which are integrated with DKG 210 gateway
- Supports all devices, which supports Modbus protocol, by integrating DKG 210 gateway
- Data recording, analysis and reporting
- Tablet and smartphone interfaces

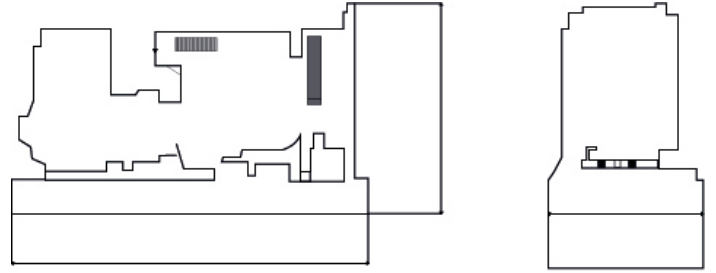


D-300 MK2 control operator / display panel

## Canopy Standart Specifications

- Compact design connection with non-welded nuts and bolts.
- Integrated canopy,generator set,exhaust system fuel tank.
- Body made from steel components treated with polyester powder coating
- Easy access to all service points
- Exhaust system inside canopy
- Large doors on each side
- Control panel viewing window in a lockable access door
- Emergency stop push button mounted on cabin exterior
- Fuel fill and battery can only be reached via lockable access doors.
- Customer options available to meet your applications needs.
- Katana makes its generating sets noise level tests in accordance with directive 2000/14/EC validation of the noise level test has been aproved by the notified body Szutest (CE conformity assessment body).

### Open



### Enclosed



	Dry Weight (kg)	Lenght (mm)	Width (mm)	Height (mm)	Tank Capacity (L)
<b>Open type</b>	5500	4700	2200	2900	1100
<b>Canopy</b>	6000	5000	2200	3400	1100

## Certificates



Katana Generator has Quality Management Systems certificate. ISO 9001:2015



Katana Generator has Occupational Health and Safety Management Systems certificate. ISO 18001: 2007



Katana Generator has Environmental Management System certification. ISO 14001:2015



This generator set is available with CE certification.

### Katana Power Products Katana Güç Ürünleri San. Tic. Ltd. Şti.

Adress : Gebze Güzeller Organize Sanayi Bolgesi  
Yunus Emre Sok. No :3  
Gebze / KOCAELI / TURKEY  
Telephone: 444 5 978  
+90 262 502 10 90  
Faks : +90 262 502 10 77  
E Mail : katana@katana.com.tr



[www.katana.com.tr](http://www.katana.com.tr)