



**ENERGY  
FOR LIFE**



**SY-90**

**DIESEL GENERATING SET 90 KVA**

		<b>Standby</b>	<b>Prime</b>
<b>Power</b>	kVa	<b>90</b>	<b>81.8</b>
<b>Power</b>	kW	<b>72</b>	<b>65.4</b>
<b>Rated speed</b>	Rpm	<b>1500</b>	
<b>Voltage</b>	V	<b>400/230</b>	
<b>Power factor</b>	Cos Phi	<b>0,8</b>	

**Continous power**

Continuous working power under constant load. The average load value can be 100%. It cannot be overloaded.

**Standby Power**

Working power in limited time under variable load. With an average load of 70%, it can operate for a total of 200 hours a year. It is used as backup power in mains power outages. Cannot be overloaded.

**Prime Power**

Continuous working power under variable load. Average load value should be 70%. Every 12 hours

10% can be overloaded.



## Engine

Brand	Yangdong	
Model	Y4110ZLDA	
Frequency	Hz	50
Standby Power	kW	79.2
Prime Power	kW	72
Displacement	lt.	4.3
Number of cylinders	4	
Rated Speed	rpm	1500
Aspiration	Turbocharged	
Cooling Method	Water cooled	
Type	Direct injection	
Bore x Stroke	mmxmm	110 X 118
Governor type	Mechanic	
Fuel Cons.	%100 lt.	22.6
Fuel Cons.	%50 lt.	11.5
Oil Capacity	lt.	13
Coolant Capacity	lt.	18
Voltage	V	24V
Fuel Capacity	Lt.	175

## Alternator

Voltage	V	230/400
Frequency	HZ	50
Automatic Voltage Regulation	±%	% 4, engine regulator 1,0 ±%
Standby	kVA	90
Prime	kVA	81.8
Power Factor	Cosφ	0,8
Insulation System	IP22 / H	
Warning system	Self excited	

## DIMENSIONS

### Silent type

W x L x H	mm	1010 x 2410 x 1560
Weight	kg	1190
Tank capacity	lt	175

### Open type

W x L x H	mm	1010 x 2100 x 1310
Weight	kg	710
Tank capacity	lt	175

### Standard Features

Water cooled diesel engine  
Radiator and mechanical fan  
Protective cage that prevents touching rotating and hot parts  
Electric starter and charge alternator  
Battery, cables and stand  
Steel chassis and anti-vibration wedges

Electronic battery charger  
Operating and installation manual  
Alternator with single bearing and H insulation class  
Industrial capacity muffler and flexible steel compensator  
Flexible fuel connection hoses  
Engine water heater  
Fuel tank integrated into the chassis

## CONTROL SYSTEM

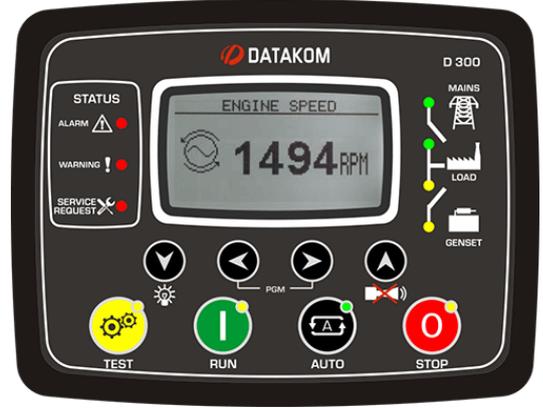
### DATAKOM D-300

The D-300 is a cost effective, modern technology genset controller ready for internet monitoring. Its main advantages are multifunctionality, support for multiple topologies, harmonic analysis and detailed power measurements.

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

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

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



FUNCTIONS	COMMUNICATION	FEATURES	
AMF unit	4-band GPRS modem (optional)	Diesel and gas genset support	Dual mutual standby with equal aging of gensets
ATS unit	USB Device	400Hz operation support	Manual "speed fine adjust" on selected ECUs
Remote start controller	RS-232 (2400-57600baud)	400 event logs, full snapshot	Automatic fuel pump control
Manual start controller	J1939-CANBUS	All parameters front panel editable	Disable protections feature
Engine controller	Geo-locating through GSM	3 level configuration password	Excess power protection
Remote display panel	Internet Central Monitoring	128x64 graphical LCD display	Reverse power protection
	Free PC software: Rainbow Plus	Downloadable languages	Overload IDMT protection
	Modbus RTU	Waveform display of V & I	Load shedding, dummy load
	GPS support (RS-232)	Harmonic analysis of V & I	Multiple load management
		16Amp MCB & GCB outputs	Current unbalance protection
		8 configurable digital inputs	Voltage unbalance protection
		6 configurable digital outputs	Fuel filling & fuel theft alarms
		3 configurable analog inputs	Battery back-up real time clock
		Both CANBUS-J1939 & MPU	Idle speed control
		3 configurable service alarms	Battery charge run enabled
		Multiple automatic exerciser	Combat mode support
		Weekly operation schedule	