



AMERICAN ARAB AVENUES
INSPIRING ENGINEERING



ENTER THE NEW WORLD

INTRODUCING

**India's first Smart Genset series with
free 5 years warranty* on complete genset
5 kVA to 1250 kVA**



Free 5 years warranty across 10 kVA to 500 kVA
Free 5 years 5C warranty across 5 kVA to 1250 kVA



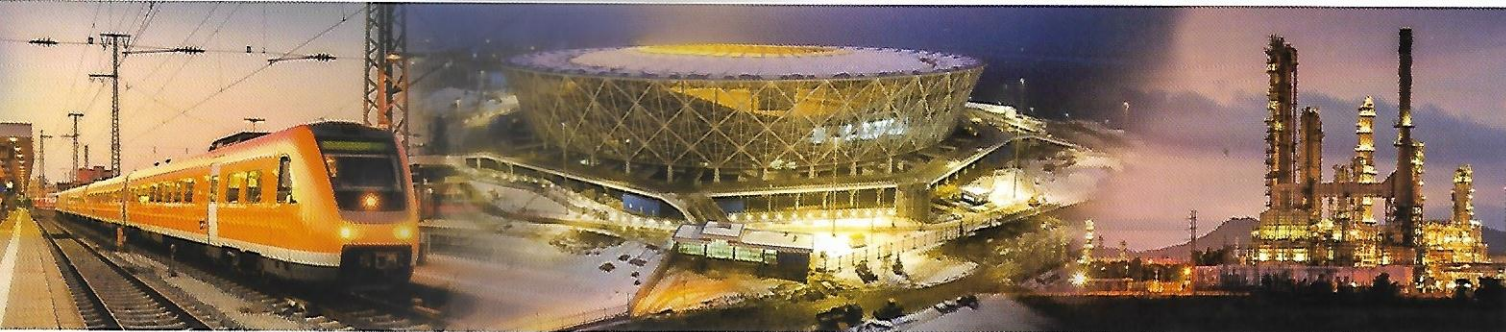
AMERICAN ARAB AVENUES
INSPIRING ENGINEERING



ENTER THE NEW WORLD

Sr. No.	Genset rated - kVA →	5	7.5	10	15	20	25	30	40	45X	45	50	62.5
A	Genset specification ↓												
1	Genset rating	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Stand-By	Prime	Prime	Prime
2	Genset output (kVA/kWe)	5 / 4	7.5 / 6	10 / 8	15 / 12	20 / 16	25 / 20	30 / 24	40 / 32	45 / 36	45 / 36	50 / 40	62.5 / 50
3	Genset model	GPAL-5E	GPWII-7.5	GPWII-P11-10E	GPWII-P11-15X	GPWII-P11-20X	GPWII-P11-25E	GPWII-P11-30X	GPWII-P11-40X	GPWII-P11-45X	GPWII-P11-45B	GPWII-P11-50	GPWII-P11-62.5
4	Gross engine power (kWm)	6.1	8	13.2	15.9	18.5	25.5	31.2	42.8	42.8	59	59	59
5	Engine model	LDA 510 1B1	G 600 W	G12 - II	G15 - II	G20 - II	G25 - II	G30 - II	G40 - II	G40 - II	3G11TAG25	3G11TAG25	3G11TAG25
6	Aspiration / Cooling	Air cooled	Water cooled	Water cooled	Water cooled	Water cooled	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC
7	No. of cylinders / arrangement	1	1	2/inline	2/inline	3 / inline	3 / inline	3 / inline	4 / inline	4 / inline	3 / inline	3 / inline	3 / inline
8	Displacement (L)	0.51	0.612	1.43	1.56	2.14	2.14	2.14	2.86	2.86	3.66	3.66	3.66
9	Bore x Stroke (mm)	85 X 90	92 X 92	91 X 110	95 X 110	91 X 110	91 X 110	91 X 110	91 X 110	91 X 110	108 X 133	108 X 133	108 X 133
10	Compression ratio	18.1	18.1	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.2	17.2	17.2
11	Rated RPM	3000	3000	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
12	Governor type / Class	Mech / G2	Mech / G2	Mech / G2	Mech / G2	Mech / G2	Mech / G2	Mech / G2	Mech / G2	Mech / G2	Mech / G2**	Mech / G2**	Mech / G2**
13	Frequency regulation	-	-	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous
14	Air cleaner type / qty	Oil bath / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01
B	Exhaust system												
1	Max allowable backpressure (kPa)	4.5	7.2	4	4	4	5.5	5.5	6	6	4.5	4.5	4.5
2	Exhaust temperature (Deg C)	550	550	550	550	550	550	550	550	550	550	550	550
3	Silencer type	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
C	Engine electrical system												
1	Charging alternator VDC / Amps	-	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A
2	Starter motor rated voltage (DC)	12	12	12	12	12	12	12	12	12	12	12	12
3	Battery voltage (DC) / Capacity (AH)	12V / 35 AH	12V / 65 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH
D	Fuel System												
1	Fuel tank capacity (L)	15	55	40	40	60	60	60	100	100	100	150	150
E	Fuel consumption @ % load (LPH)(including radiator fan + other accessories)												
1	LPH @ 100%	1.6	2.6	3.0	3.9	5.0	6.3	7.4	9.0	11.1	10.7	12.1	14.9
2	LPH @ 75%	1.2	2.3	2.3	2.8	3.8	5.0	5.9	7.0	8.6	8.5	8.9	11.00
F	Lubricating Oil System												
1	Lube oil sump capacity (L)	1.25	1.75	5.5	5.5	6.5	6.5	6.5	8.5	8.5	8.5	7.6	7.6
2	Lube oil change period (Hrs)	300	300	500	500	500	500	500	500	500	500	500	500
3	Lube oil consumption (% of SFC)	≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.1%	≤0.2%	≤0.2%	≤0.2%
4	Lube oil filter type / qty	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01
G	Alternator Specification												
1	Alternator Make	NSM	NSM	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
2	Voltage (1P / 3P)	230 / 415	230 / 415	230 / 415	230 / 415	230 / 415	230 / 415	230 / 415	230 / 415	415	415	415	415
3	Frequency (Hz)	50	50	50	50	50	50	50	50	50	50	50	50
4	Current (1P / 3P) (Amps)	21.79/6.96	32.6/10.43	43.47/13.91	65.21/20.86	86.95/27.82	108.69/34.78	130.43/41.73	173.91/55.64	62.6	62.6	69.56	86.95
5	Type	2P, rotating field	2P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field
6	Voltage regulator	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
7	Voltage regulation - %	±5%	±5%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%
8	Insulation class	H	H	H	H	H	H	H	H	H	H	H	H
9	Temperature rise (Deg C)	125	125	125	125	125	125	125	125	125	125	125	125
10	Bearing (qty / type)	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed
H	Cooling System												
1	Coolant capacity (Eng+Rad) (L)	NA	4	7.5	7.5	11.5	12.5	12.5	14	14	15	20	20
I	Controller												
1	Controller Model No	DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 4522
J	Genset Outer Dimensions												
1	L (mm)	1110	1600	1420	1420	1650	1650	1650	1890	1890	2500	2500	2500
	W (mm)	730	800	930	930	930	930	930	930	930	1150	1150	1150
	H (mm)	750	1050	1242	1242	1242	1242	1242	1320	1320	1535	1535	1535
2	Dry Weight (Approx.) - KG	300	400	595	660	810	860	945	1260	1490	1210	1210	1230

- Ref : * Genset can also be used for PF = 1 **Class G3 governing available on request
- PRIME POWER RATING as per ISO 8528:** Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited with average loading of 75% of rated load. A 10% overload capacity is available for one hour in twelve.
- Specific fuel consumption is based on HSD complying to IS 1460 and tolerances with respect to ISO 3046 and ISO 8528.



	82.5	100	125	160	180	200	250	320	400	500	1010	1250
Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime
60	82.5 / 66	100 / 80	125 / 100	160 / 128	180 / 144	200 / 160	250 / 200	320 / 256	400 / 320	500 / 400	1010 / 808	1250 / 1000
GPWII-P11-75	GPWII-P11-82.5	GPWII-P11-100E	GPWII-P11-125E	GPWII-P11-160E	GPWII-P11-180	GPWII-P11-200	GPWII-P11-250E	GPWII-P11-320E	GPWII-400	GPWII-500	GPW-1010	GPW - 1250
74.5	93	114	144.5	178.8	227	284	444	444	880	1100	1100	1100
3G11TAG26	4G11TAG26	4G11TAG25	4G11TAG26	6G11TAG26	6G11TAG29	6G11TAG29	D3V6TAG21	D3V8TAG21	12V14TAG23	12V14TAG23	GPW - 1010	GPW - 1250
TCAC	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC	TCAC
3 / inline	4 / inline	4 / inline	6 / inline	6 / inline	6 / inline	6 / inline	6 / Vee	8 / Vee	12 / Vee	12 / Vee	12 / Vee	12 / Vee
3.66	4.87	4.87	7.31	7.31	7.31	10.04	13.38	16.38	16.38	31.8	39.2	39.2
108 X 133	108 X 133	108 X 133	108 X 133	108 X 133	108 X 133	108 X 133	128 X 130	128 X 130	115 X 135	115 X 135	150 X 150	150 X 185
17.2	17.2	17.2	17.2	17.2	17.2	17.2	16.8	16.8	17	17	15.7	15
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Mech / G2**	Mech / G2**	Mech / G2**	Mech / G2**	Mech / G2**	Mech / G2**	Mech / G2**	Elec / G3	Elec / G3	Elec / G3	Elec / G3	Elec / G3	Elec / G3
Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous	Isochronous
Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 01	Dry / 02	Dry / 02	Dry / 02	Dry / 02
4.5	4.5	4.5	5.5	5.5	5.5	5.5	4.5	4.5	7	7	7.5	7
525	500	525	525	550	550	550	550	550	550	550	550	550
Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	12 V / 35 A	24 V / 30 A	24 V / 30 A	24 V / 44 A	24 V / 44 A	24 V / 55 A	24 V / 44 A
12	12	12	12	12	12	12	24	24	24	24	24	24
12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 88 AH	12V / 130 AH	12V / 130 AH	12V / 130 AH	24 V / 180 AH X 2	24 V / 180 AH X 2	24 V / 180 AH X 2	24 V / 180 AH X 2	24 V / 180 AH X 2	24 V / 200 AH X 2
200	350	350	360	400	400	650	810	990	990	990	990	990
19.1	23.6	28.6	36.5	40.2	44.8	58.2	76.5	84.7	107.9	193.7	252.0	252.0
14.0	17.4	20.8	27.2	30.2	33.0	42.3	57.7	63.6	82.5	147.0	188.0	188.0
7.6	10	10	17.5	17.5	17.5	27.5	40	50	50	109	155	155
500	500	500	500	500	500	500	500	500	500	500	500	500
≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%
Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 01	Spin on / 02	Spin on / 02	Spin on / 02	Spin on / 02	Spin on / 02	Spin on / 02
LS	LS	LS	LS	MECCALTE	MECCALTE	MECCALTE	MECCALTE	LS	LS	LS	LS	LS
415	415	415	415	415	415	415	415	415	415	415	415	415
50	50	50	50	50	50	50	50	50	50	50	50	50
114.77	139.12	173.9	222.59	250.41	278.24	347.8	445.18	556.48	695.6	1406	1740	1740
4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field	4P, rotating field
Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±0.5%	±0.5%
H	H	H	H	H	H	H	H	H	H	H	H	H
125	125	125	125	125	125	125	125	125	125	125	125	125
1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed	1, sealed
20	25	40	35	35	35	45	110	120	120	200	200	200
DSE 4522	DSE 4522	DSE 4522	DSE 4522	DSE 6120	DSE 6120	DSE 6120	DSE 6120	DSE 6120	DSE 6120	DSE 6120	DSE 7320	DSE 7320
2800	3000	3000	3800	4000	4000	4500	5000	5600	5600	7400	6500	6500
1150	1350	1350	1350	1600	1600	1800	2000	2000	2000	2416	2600	2600
1540	1885	1885	1900	1900	1900	2070	2165	2300	2300	3913	3613	3613
1270	1600	1800	2150	2295	2300	4050	4300	5490	5610	11500	11000	11000

Conformance standards: Engine - BS 5514, ISO 3046, Alternator - IS 4722, IS 13364 (I & II), Genset - ISO 8528 and Tolerances as applicable
Please refer our GA drawing for overall dimension with add on components like silencer, ducts etc.
Product specifications are subject to change without prior notice due to the policy of continuous improvement.

Factory built DG sets

- Compact footprint
- Low noise level
- Economical operation
- Environment friendly
- Extensive services & parts network



Engines

- Rated speed is 1500 RPM
- GCL 5 kVA & 7.5 kVA engines are 3000 RPM engines
- 5 kVA Genset comes with air cooling. 7.5 kVA and above come with water cooling
- A2 and better engine governing class with Mechanical Governor
- G2 and better DG performance class
- Fuel and lube oil filters
- Dry type air cleaner with vacuum indicator
- 5 kVA is oil bath type air cleaner
- Suitable electric starting system

Recommended oil & fuel

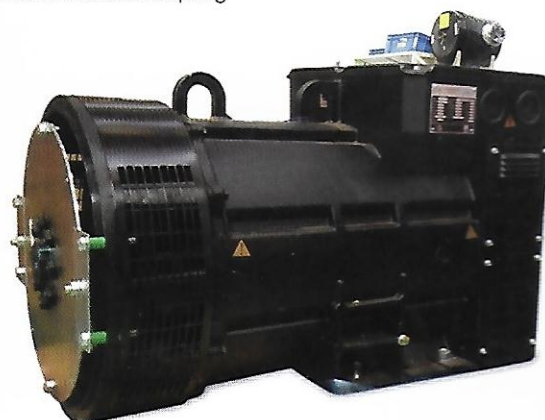
- Recommended fuel IS 1460, HSD
- Recommended lube oil Greaves

Control Panel

- Suitable circuit breaker
- Controller with multi-feature display
- Load ON and DG set running indication lamps
- Aluminium conductor cables between alternator and control panel
- Uninywin cables between alternator and switchgear
- In-built battery charger

Alternator

- Offering advance technology for alternator
- Brushless type
- IP 23 protection with class 'H' insulation & temperature limited to class 'H' insulation
- Permissible overload of 10% for one hour in hours of operation of alternator
- Automatic Voltage Regulator
- Digital Voltage Regulator (optional)
- 25% unbalance load capability
- 5 kVA is of conical shaft coupling
- Fixed disk closed coupling



Digital DG Set Controller

- AMF enabled controller
- Digital controller with soft buttons for operations
- Automatically transfers between mains (utility) and generator for convenience
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility
- PLC editor allows user configurable functions to meet user specific application requirements
- Synchronising controller (optional)



Features

- Remote monitoring
- Remote start
- Compact and microprocessor based fully configurable control unit
- Graphic display
- Unique integrated DG set controller
- Incorporates both engine and alternator parameters in a single console

Features Displayed

- Engine oil pressure
- Coolant temperature
- Fuel level indicator (%)
- Engine RPM
- DG set running hours
- Battery voltage
- Voltage
- Phase to neutral voltage
- Phase to phase voltage
- Current (amps)
- Power factor
- kWh
- kW

Audio Visual Warning

- Low oil pressure
- High coolant temperature
- Low battery voltage
- Low fuel level

Mounting Arrangement

- Engine and Alternator are mounted on rigid base frame. Also, AVM pads are placed between base frame and engine alternator assembly to restrict vibrations.
- Fuel tank is at base of canopy
- Stand alone day tank is available as optional

Silencer

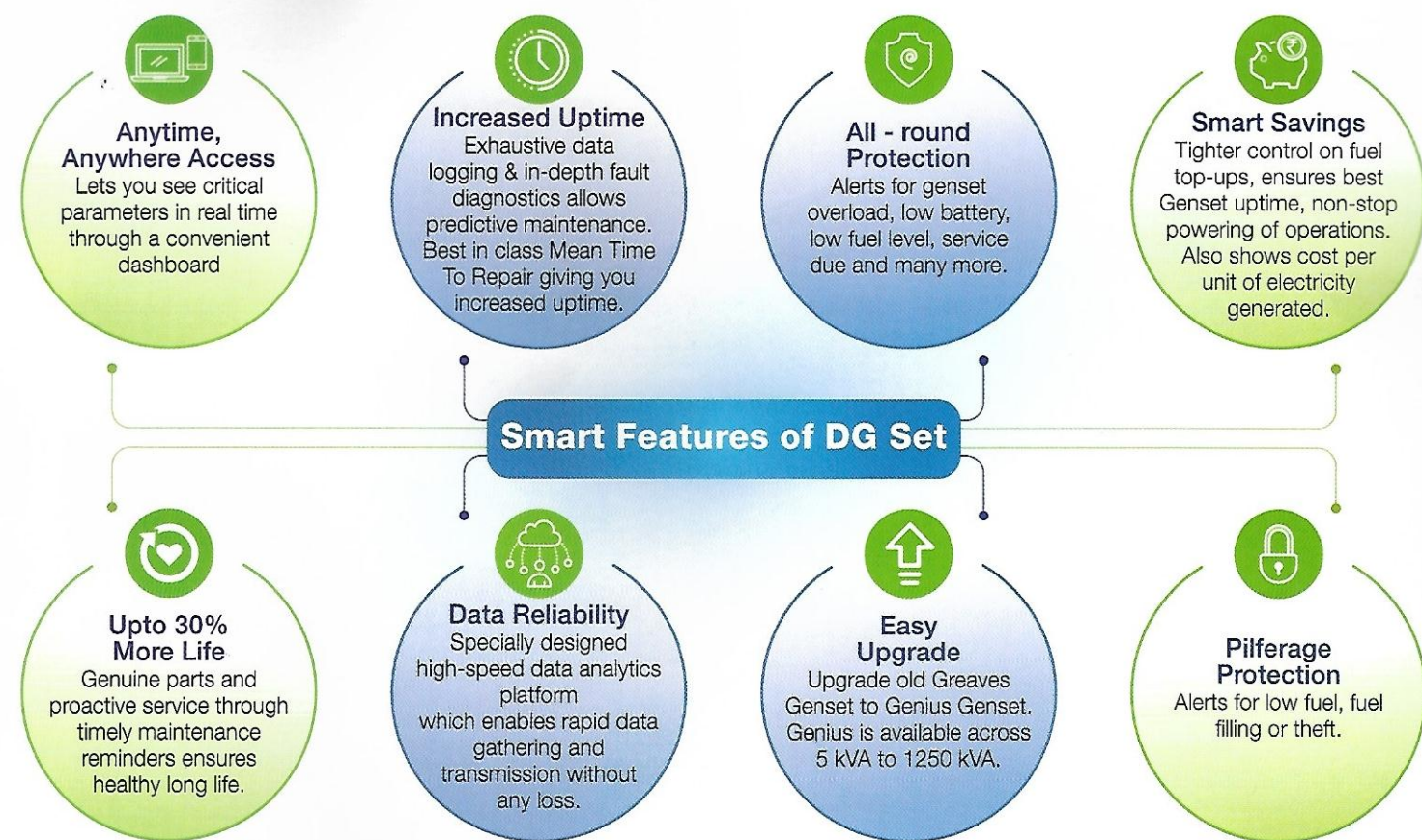
- Residential type

Shutdown with Audio Visual Annunciation

- Low oil pressure
- High coolant temperature
- Engine overspeed
- Engine underspeed
- Low fuel level
- Overload
- Over voltage
- Under voltage

Acoustic Enclosure

- Powder coated weather proof canopy. Engine and alternator mounted on AV mounts, with silencer and SS exhaust bellow optimised to meet stringent norms for sound and emission.
- Baseraill with draw-out type fuel tank, drain plug, inlet and outlet connections, air vent, level gauge



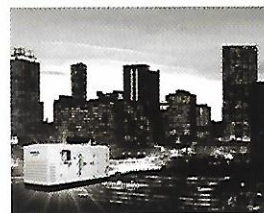
Remote Monitoring System (RMS) Features

- Separate microcontroller
- Onboard memory with SD card
- Input and output for easy integration
- Battery backup
- RS 485 Port
- Dual SIM support
- Surge and reverse power protection
- Wall and DIN mounting
- 3 LED indicator for GPS, GSM and data capture
- Secure by design and predefined access control
- Temper proof design
- Dynamic data collection
- Multi-protocol and controller support
- Cross-platform compatibility
- Real-time clock
- External GSM and GPRS antenna support
- Rapid data gathering



A Legacy of Excellence

- Core competencies: Generator Sets, Pump Sets, Diesel/Petrol Engines, and Farm Equipments
- Manufacturing 5 lakh engines annually
- Strong team of more than 300 R&D professionals
- Significant strengths: Technology, Value, Reach
- Extensive marketing and service network: Over 1200 sales & services centres across India
- Global footprint with local presence in SAARC, Africa and Middle-East



Non-stop Power



Driving Business



Enhancing Productivity



Engines of Growth

Power Generation Business

- Over 5 decades of experience in generator sets.
1 Lakh+ Gensets population in operation.
- New Genset manufacturing facility at Pune with annual capacity of more than 10000 Gensets
- Fuel-efficient, rugged and reliable
- Total solutions by single point of contact for engineering design, sales, service & spare parts
- ARAI approved testing facility equipped with sophisticated equipment is among the best in the industry and can test engines up to 2 MW
- State-of-the-art manufacturing facilities at Pune for multi-cylinder / higher HP engines and Gensets



Powering Missions



Supporting Large Infrastructure Projects

Esteemed Clientele



AMERICAN ARAB AVENUES
INSPIRING ENGINEERING



ENTER THE NEW WORLD