

Product Safety Features

- Low operating & maintenance cost with service interval of 500hrs/1 Year
- Wide Service Support Network across PAN India
- Supply to various rugged applications
- Proven engine in industry
 - CPCB In-Compliance
 - Single Window Warranty Policy
- Sales, Service, Spares, Warranty under one umbrella
- Low footprint
- Standard warranty of 2 Years/5000 Hours (whichever is earlier) on complete genset
- 3C Warranty for 5 Years/5000 Hours (whichever is earlier) on five critical components of engine



Engine

- Multi-Point Overhead Engine, In-Line 4 stroke, radiator cooled engine
- CRDI engine with Low fuel consumption
- Dry type air cleaner with service indicator
- First fill of lube oil, coolant & DEF
- Electrical starter motor with soft start system
- Battery charging alternator
- 1 x 12 V or 2 x 12 V DC battery as per requirement



Alternator

- Brushless type, screen protected, revolving field
- Self-excited alternator conforming to G1ES 60034-1
- A reliable long life with superior class 'H' insulation
- Higher motor starting capability
- Better transient response
- Ease of maintenance with integrated components and outdoor Exciter/Rotating Rectifier
- Lighter and more compact with sealed bearings for lesser maintenance and longer life



Accessories

- Specially designed to meet stringent MOEF/CPCB norms
- Designed to operate in extreme climatic conditions in temperatures ranging from -10°C to 55°C without any external aid
- Superlative fade resistant paint can last longer in tough weather conditions
- Crack out type fuel tank for easy maintenance
- The robust acoustic and insulation material (PU Foam/Roadwool) for better safety
- Lowest fuel print
- Easy access for serviceable parts
- Pre-treatment process with UV resistant powder coating of all parts
- Alloy Suspension System (ASS) for lifetime compliance
- Engines and alternator are mounted on a common MG
- Fabricated base frame with AVM pads
- Ease in fuel filling (Outside Canopy)

Controller

- 32-bit ARM Cortex M3 is a powerful ARM microprocessor based general monitoring, measuring and control system with full graphics LCD display for easy front panel access
- AMF, Manual and Remote start/stop modes for 1-ph & 3-ph gensets
- Backlit and full graphics display with power saving feature
- Engine parameter monitoring-Lube oil pressure, Engine coolant temperature, Fuel Level, Battery voltage, Engine running hours
- AC Alternator parameter monitoring-Voltage L-N & L-L
- Current, kW, kVA (Phase & Total), Frequency, kWh, PF
- General Protection:
 - Engine Low Lube oil pressure, High Coolant temperature, Battery High-Low Volt, Fail to Start, Sensor Failure, Low fuel level, Over speed
 - AC Alternator: Over/Under Voltage, Over/Under Frequency, Loss of AC sensing, Over frequency, Over Current
 - KW Overload, Undervoltage Load
- Maintenance notification based on Engine Run Hour & due date
- Communication: USB port, RS485, CAN
- Fully configurable six front panel



Control Panel

- Powder Coated Control Panel for weather proof and long lasting finish. The control panel consists of the following parts:
 - 32-bit ARM Cortex M3 Controller
 - Power Cable/Bus bars with suitable capacity with incoming/outgoing terminals
 - Indicating lamps for Load ON and Self Running
 - PowerMOSFETs for control circuit safety protection
 - MCCB of suitable rating with short circuit protection
 - Battery Charger

Optional Accessories

- Cold Starting System (Temperature range upto -20°C)
- AMF/ATS/ATS-2 Controller/Type Panel
- PMG Alternator, Space heater, STD/BTD

Remote Monitoring System

- Powerol generators are equipped with Real time remote monitoring system (RS485 & Above)
- Generator owners can monitor and diagnose their genset or entire fleet of generators from anywhere, anytime ensuring good health and efficiency of the generators
- All these critical indication alerts & notifications are sent to user mobile/PC
- The generator sets can be monitored using the available web application and mobile (Android and IOS) application from any PC or mobile to access the globe.



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POWERING THE GROWTH JOURNEY OF THE NATION
 High Performance Gensets are now
CPCB IV+ Compliant

Range available from **10kVA to 320kVA**



- Low Maintenance
- 400 Sales & Service Touch Points
- Product Life Cycle Support
- Best-in-Class Fuel Efficiency
- Superior Performance
- Excellent Diesel Loading Capacity
- IoT Feature

Technical Specifications:

Genset Rating (kVA)	10	15	20	25	30	30	36	40	45	50	55.5	60.5	100	125	150	180	200	250	300	
Gen Model	M100P1	M150P1	M200P1	M250P1	M300P1	M300P1	M360P1	M400P1	M450P1	M500P1	M555P1	M605P1	M100P1	M125P1	M150P1	M180P1	M200P1	M250P1	M300P1	
Power Rating (kW)	8	12	16	20	24	24	28	32	36	40	44.8	48	80	100	120	144	160	200	250	
No. of Phases	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	3	3	3	3	3	3	3	3	3	3	3	
Output Voltage (V)	230/415	230/415	230/415	230/415	230/415	230/415	230/415	230/415	230/415	230/415	230/415	230/415	415	415	415	415	415	415	415	
Power Factor (lagging)	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
Current (A) (Phase / 3 Phase)	43.5/139	65.2/209	87/278	108.7/348	130.7/418	130.4/417	152.4/467	173.5/556	195.2/618	226	251	276	566	719	863	1036	1178	1472	1840	
Frequency (Hz) (50/60)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	
Governing Class	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	
Starting System	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	
Fuel Tank Capacity (L)	55	55	75	75	75	75	75	75	110	110	150	150	250	250	300	300	400	400	510	
Genset Dimensions (L x W x H) (mm) Approx.	1750 x 900 x 1550	1750 x 900 x 1550	1900 x 900 x 1550	1900 x 900 x 1550	1900 x 900 x 1550	1900 x 900 x 1550	2200 x 900 x 1550	2200 x 900 x 1550	2200 x 900 x 1550	2200 x 900 x 1550	2200 x 900 x 1550	2200 x 900 x 1550	2800 x 1200 x 1575	2800 x 1200 x 1575	3200 x 1200 x 1425	3200 x 1200 x 1425	3200 x 1200 x 1425	3200 x 1200 x 1425	3200 x 1200 x 1425	
Engine Specifications																				
Make	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	
Model	M10T501	M15T501	M20T501	M25T501	M30T501	M30T501	M36T501	M40T501	M45T501	M50T501	M55T501	M60T501	M100T501	M125T501	M150T501	M180T501	M200T501	M250T501	M300T501	
Fuel System	Mechanical	Mechanical	Mechanical	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	Electronic/CRDI	
Rated Power Output (kW)	10.3	15	20	25	30	30	36	40	45	50	55.5	60.5	100	125	150	180	200	250	300	
Automation	Naturally Aspirated	Naturally Aspirated	Naturally Aspirated	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS	
No. of Cylinders	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	
Bore x Stroke (mm)	88.0 x 120	88.0 x 120	88.0 x 110	88.0 x 110	88.0 x 110	88.0 x 110	88.0 x 110	88.0 x 110	88.0 x 110	88.0 x 110	88.0 x 110	88.0 x 110	96.0 x 120	96.0 x 120	96.0 x 120	105.0 x 127	105.0 x 127	105.0 x 127	105.0 x 127	
Displacement (Ltr)	15	15	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.5	3.5	3.5	4.7	4.7	4.7	4.7	
Rated Output (kW)	5	5	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Rated Output (kVA)	5	5	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Rated Output (kVA)	5.5	5.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	10	10	10	10	10	10	10	
Alternator Specifications																				
Make (as per option)	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	LS-02	
Type	Single Bearing, DriveShaft Type																			
Excitation Type	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	PE3	
Voltage Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	
Class of Insulation	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
Maximum Unbalanced Load at 100% Phase	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	

- Low Fuel Consumption
- Low Ownership Cost
- Long Life Reliable
- Easy Serviceability

Note:
 • All engines & alternators conform to respective IS standards
 • All the genset specifications conform to ISO 8528 standard
 • All specifications are at Standard RTP operating conditions
 • Above specifications are subject to change without prior notice due to continuous product improvements