

EVERDIGM GENERATOR SET



■ Open Sets

Application : Standby and Prime Use

Installation : Indoor

Power range : 20 to 2300KVA

Ideal for :



House



Building



Factory



Optimum system configuration for the highest performance

High-tech injection and charging system

The state of the art high-tech injection and charging system are applied in order to achieve the excellent combustion and low fuel consumption.

Reliable high quality system

High quality electrical and cooling system and various support equipments are applied to improve the performance of products

High quality electricity

2/3 pitch winding is applied to minimize harmonic distortion and low frequency and over exciting protection device increases efficiency.

Perfect cooling system

Optimized coolant system by analysis of heating balance improves coolant efficiency in harsh environments.

Frequency regulation accuracy

The voltage regulator provides $\pm 1.0\%$ regulation, under speed protection, stability adjustment to optimize transient performance.



Radiator with fan



Protection guard



Cyclone pre-filter

Heavy duty
air cleaner

Alternator

Circuit Breaker
for poles

Control panel



Battery Charger



Air / Coolant Heater

Warms up an engine to start easily in cold weather



Rubber cushions

Absorbs vibration between engine and base frame



Circuit Breaker (4 pole)

Silver alloyed contacts used for long-term performance



Fuel Tank

Includes suction and return lines with a sight level gauge and drain plug

Features

Quality engine and genuine parts

For durability and better performance, Everdigm generator sets are powered by reliable engine such as Doosan, MTU and Cummins and only genuine parts are used for assuring the quality

Reliable alternator

Everdigm has own designed alternator and it is synchronous, four pole, 2/3 pitch, revolving field and directly connected to the engine. And it is easy to alter the voltage by reconnection for 12-leads on terminal plate, also the units can be run as single phase.

Cooling system

The engine is cooled with an integral, unit mounted radiator, fan, water pump and closed coolant recovery system

Controller (EDGC-10)

Everdigm controller is designed to assist users easily to control generator sets and optimized protection device built in the controller against malfunctioning and abnormal conditions.

Base-plate and anti vibration mounting

Everdigm generator set is mounted on a heavy duty steel base-plate to maintain alignment between components with bonded rubber anti-vibration units positioned between the engine and alternator support feet and the base plate.

■ Sound-Proof Sets

Application : Standby and Prime Use

Installation : outdoor

Power range : 20 to 930KVA

Ideal for :



House



Building



Factory



Construction Area



Everdigm offers less vibration generator canopies for weather protection and sound attenuation with pleasant appearances, quality painting and completely enclosed exhaust systems.

Designed for weather protection

The canopy is made of heavy duty steel on strengthened welded frame and serves to protect the equipment from inclement weather

Designed for sound attenuation

The canopy is composed of multi layered sound absorbing and fire resisting materials, significantly reduces the noise level.

- Special designed muffler, dramatically reduces the genset's ventilation noise to perform quiet running.
- Use the sound-absorbing cotton and muffler to minimize the noise level.

Efficient ventilation system

Efficiently designed for the ventilation system, reduces the noise and effectively drops the power loss.



Folk lift hole



Exterior emergency button



Cooling water /engine oil drains



Exhaust integrated into the enclosure



Battery with cable



Access door to control panel

Features

Convenient refueling

Everdigm soundproof sets are built with large-capacity fuel tanks which deliver a minimum of 8 hours run time. This enables longer running times between refueling, thus reducing space requirements on site, and reduces operating costs.

Precise design for air inlet and exhaust system

We adopt the detailed design of the air inlet and the exhaust system to meet ventilation requirement under the different environments.

Ergonomical design of controller

EDGC-10 controller is a microcontroller based generator control unit that is used to start and stop the Genset manually or via a remote start signal when in automatic mode. The device is designed to run and monitor system parameters to ensure fail safe genset operation.

Easy maintenance

All daily maintenance requirements can be performed on both sides of the machine, and the wide doors provide easy access to all areas of the machine. External drain for oil, fuel and water are installed for convenience in performing routine maintenance.

Easy transportation

The sturdy soundproof steel bonnet on a strengthened welded steel skid base allows easy handling with a forklift. The balance point lifting eye fitted on the roof of each machine facilitates easy transportation using a crane.



Lifting Eye

It is attached for increasing mobility of the product



Hinge Doors

Stainless steel locks and hinges for easy handling



Coolant/ Engine Oil Drains

Engine coolant and oil drain extension provided for cleaner and convenient engine servicing



Emergency Stop Button

Emergency stop push button for protecting the personal safety of the operator and the generating set

Container Sets

Application: Standby and Prime Use

Installation: Outdoor

Power range: Over 650KVA

Ideal for :  House  Building  Factory  Construction Area

Image & Description



1. Fuel level gauge



2. Interior of Genset



3. Control panel



4. Access door to control panel



5. Fuel tank



6. Interior lights

Features

Everdigm Container set adopts ISO standard 20'ft container for Genset up to 800kVA and ISO standard 40'ft High Cubic container for Genset up to 2300kVA.

The container set provides optimum performance, reliability, and versatility for standby and prime power applications.

Production tested and delivered in a package that is fully ready for an operation with no necessity of additional installation that considerably reduces capital expenses for construction or preparation of special premise.

The package utilizes custom designed switchgear to meet severe customer requirements. Containerized Generator provides reconnectable voltage via a link board design, automatic start/stop control.

Trailer Sets

Application: Prime Use

Installation: Outdoor

Power range: 60 to 630KVA





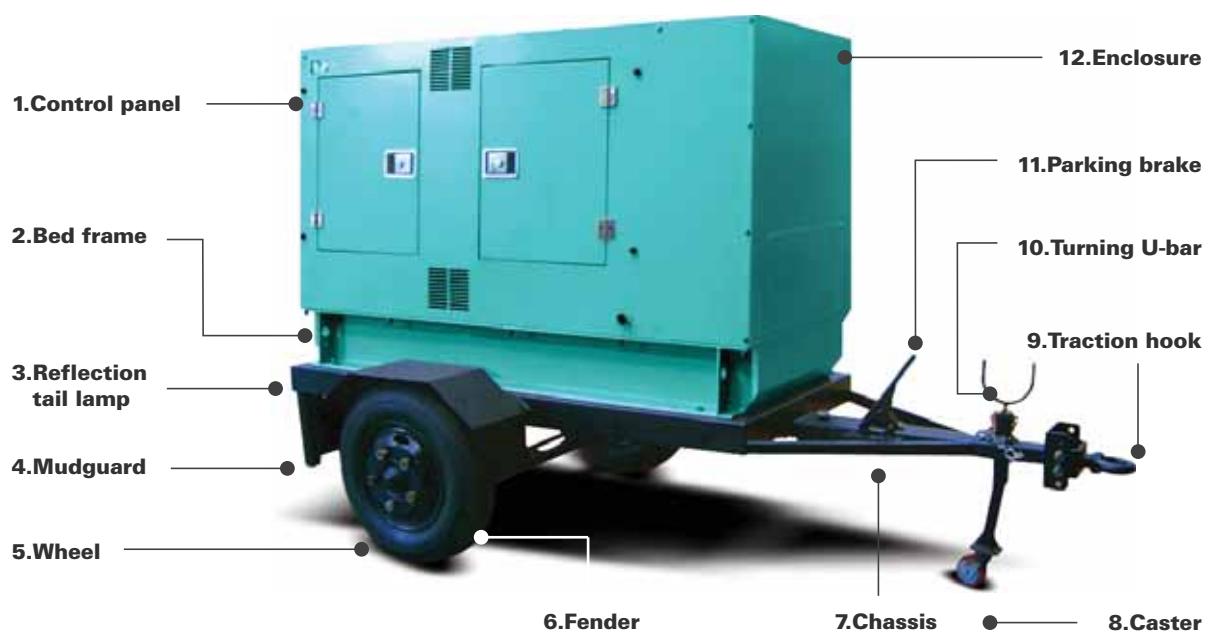
Ideal for :  Airport  Harbor  Mining  Construction Area

Image & Description



Features

EverdigM trailer set features different structures as single bearing double wheels or double bearing 4 wheels depending on the Genset capacity.

The torsion axle suspension system is provided to overcome various rough road condition and towing device is set aside on the chassis wheel to keep the balance.

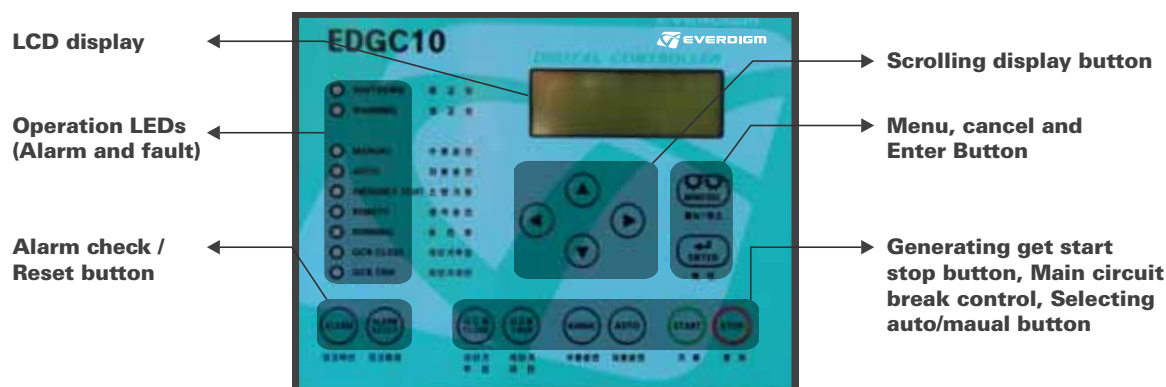
The trailer set is built with large-capacity fuel tanks which deliver a minimum of 8 hours run time. This enables longer running times between refueling, thus reducing space requirements on site, and reduces operating costs.

The canopy is composed of multi layered sound absorbing and fire resisting materials, significantly reducing the noise level.

All daily maintenance requirements can be performed on both sides of the machine, and the wide doors provide easy access to all areas of the machine.

Control system (Single operation)

For the single operation, EVERDIGM Digital Genset Controller (EDGC-10) is a micro controller based generator control unit that is used to start and stop the Genset manually or via a remote start signal when in automatic mode. The device is designed to run and monitor system parameters to ensure fail safe genset operation.



1. Monitoring

EDGC-10 indicates working status and conditions of generator sets.

1. Voltage(L-L,L-N)[V]	2. Frequency[Hz]	3. Current[A]
4. Power[KW]	5. Power Factor	6. Battery Voltage[V]
7. Engine RPM[rpm]	8. KWHours[KWh]	9. Running hours[h]
10. Coolant Temperature	11. Oil Pressure	12. Run or stop
13. Gen-set Mode	14. ACB close or open	15. Alarm

2. Control

EDGC-10 Contains several buttons for regulating the system

1. Gen-set Start	2. Gen-set Stop	3. ACB Close or open	4. Mode change
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3. Protective functions

EDGC-10 provides alarm and status indicating lamps to indicate existing alarm and shutdown conditions for the protection of generator set.

	Function	E/G Stop	GCB Trip	Alarm LED	Error Message	remark
Heavy Fault	Low oil press	O	O	O	O	Heavy fault : Below 0.7 bar
	High coolant temp	O	O	O	O	Heavy fault : Above 103°C
	Fail to start	O	O	O	O	Start attempts but it's failed
	Overspeed	O	O	O	O	Above 115% of rated speed
	Emergency stop	O	O	O	O	Push the emergency button
	Over voltage		O	O	O	Above 110% of rated voltage
	Over current		O	O	O	Above 105% of standby power
	Under voltage		O	O	O	Below 90% of rated voltage
Light Fault	OCGR	X		O		Occur the current fault
	Speed sensor failure	X	X	O	O	Faulty MPU
	GCB Aux. failure	X	X	O	O	Faulty Aux. contact of GCB
	No charging	X	X	O	O	Cannot charge the battery
	Low coolant temp.	X	X	O	O	Below 0°C of coolant temp.
	Low fuel level/over excitation	X	X			Lack of fuel or occur over excitation
	Battery high voltage	X	X	O	O	Above 30Vdc(24Vdc) / 16Vdc(12Vdc)
	Battery low voltage	X	X	O	O	Below 20Vdc(24Vdc) / 9Vdc(12Vdc)
	Over load	X	X	O	O	Above 105% of standby power

* "O" : Applicable, "X" : Not applicable, " " : Option

Control system (Parallel operation)

Everdigm Generator Synchronization Controller IntelliGenNT is a comprehensive controller for both single and multiple gen-sets operating in standby or parallel modes. Compact construction is optimized condition for these purposes and various HW modifications allow customers to select the optimum type for a particular application. A built-in synchronizer and digital isochronous load sharer allow a total integrated solution for gen-sets in standby, island parallel or mains parallel. Native cooperation of up to 32 gen-sets is a standard feature.



Control system (Remote control)

Everdigm genset can be remotely controlled by PC and digital remote controller from a considerable distance. And it provides high fuel and oil savings, extends engine life and leads to a level of reduction in manpower and energy requirements.



Our Communications Interface Module and Software Package allows operators to monitor and control generator set from personal PC.



The remote controller allows the engine starting/stopping and monitoring working status such as voltage, frequency, engine speed.

Product line-up



DOOSAN ENGINE

E-Series is designed on the basis of Doosan diesel engine(Korea) in power range from 60 up to 930 Kva. Generator sets with Doosan engine are applied as prime and standby power supply and proved to operate in harsh weather conditions with various application. G-Series is designed on the basis of Doosan Gas engine having a power range from 135 up to 370 Kva. CG-Series has a total self contained system synchronizing two Gensets within one container and offers power range from 1000 up to 1300 Kva.

DOOSAN ENGINE (E-SERIES)

Generator set									Doosan Engine					Gen Set Physical Data			
MODEL	1500RPM(50Hz)				1800RPM(60Hz)				MODEL	1500RPM(50Hz)		1800RPM(60Hz)		BORE & STROKE (mm)	NO. OF CYLINDER	DIMENSION WxLxH(mm)	WEIGHT (KG)
	STANDBY		PRIME		STANDBY		PRIME			STANDBY (PS)	PRIME (PS)	STANDBY (PS)	PRIME (PS)				
	KW	KVA	KW	KVA	KW	KVA	KW	KVA									
EDG-60E	52	65	48	60	60	75	55	69	DB58	80	73	95	87	102X118	L-6	2100X850X1240	1300
EDG-85E	75	94	68	85	90	113	80	100	D1146	116	105	143	130	111X139	L-6	2200X850X1450	1700
EDG-130E	100	125	91	114	130	163	115	144	D1146T	160	145	202	170	111X139	L-6	2200X850X1510	1800
EDG-170E	145	181	130	163	170	213	155	194	P086TI-1	223	203	260	237	111X139	L-6	2550X950X1660	2100
EDG-200E	176	220	160	200	200	250	180	225	P086TI	270	240	303	279	111X139	L-6	2590X950X1660	2100
EDG-275E	242	303	220	275	275	344	250	313	P126TI	370	328	405	378	123X155	L-6	2890X1110X1630	2400
EDG-300E	260	325	235	294	300	375	275	344	P126TI-2	400	360	465	418	123X155	L-6	2890X1110X1630	2400
EDG-330E	280	350	255	319	330	413	300	375	P158LE-2	437	399	510	470	128X142	V-8	2840X1400X1830	2500
EDG-360E	320	400	290	363	360	450	320	400	P158LE-1	492	444	546	498	128X142	V-8	2880X1400X1830	2700
EDG-400E	352	440	320	400	400	500	360	450	P158LE	563	494	623	547	128X142	V-8	2880X1400X1830	2700
EDG-460E	405	506	360	450	460	575	415	519	DP158LC	589	533	665	601	128X142	V-8	2873x1400x1815	2890
EDG-500E	460	575	420	525	500	625	450	563	DP158LD	672	609	750	654	128X142	V-8	2873x1400x1815	3090
EDG-560E	509	636	460	575	560	700	508	635	DP180LA	729	661	804	727	128X142	V-10	3163X1400X1874	3180
EDG-610E	560	700	510	638	610	763	548	685	DP180LB	810	734	866	784	128X142	V-10	3163X1400X1874	3240
EDG-660E					660	825	600	750	DP222LA			950	859	128X142	V-12	3396X1400X2164	3710
EDG-700E	600	750	550	688	700	875	640	800	DP222LB	1012	915	870	788	128X142	V-12	3396X1400X2164	3710
EDG-750E	660	825	600	750	750	938	680	850	DP222LC	1074	972	950	861	128X142	V-12	3489x1400x2164	3890

DOOSAN ENGINE (G-SERIES)

Generator set					Gen Set Physical Data						
MODEL	1500RPM(50Hz)		1800RPM(60Hz)		MODEL	PRIME(PS)		BORE& STROKE (mm)	NO. OF CYLINDER	DIMENSION WxLxH(mm)	WEIGHT (KG)
	PRIME		PRIME			(50Hz)	(60Hz)				
	KW	KVA	KW	KVA							
ED-135G	108	135	135	169	GE08TIR	174	204	111x139	L-6	2684x1151x1763	2300
ED-175G	140	175	175	219	GE12TIR	238	272	123x155	L-6	2800x1151x1763	2700
ED-235G	188	235	235	294	GV158TIR	313	367	128x142	V-8	2823x1244x1850	3400
ED-300G	240	300	300	375	GV180TIR	394	462	128x142	V-10	3100x1380x2050	3900
ED-370G	296	370	370	463	GV222TIR	476	557	128x142	V-12	3400x1620x2050	4320

DOOSAN ENGINE (CG-SERIES)

1500RPM(50Hz)					1800RPM(60Hz)				Gen Set Physical Data		
MODEL	PRIME		STANDBY		PRIME		STANDBY		MODEL	ASPIRATION	GOVERNOR
	KW	KVA	KW	KVA	KW	KVA	KW	KVA			
EDCG-1000E	840	1050	920	1150	900	1125	1000	1250	102X118	2100X850X1240	2700X1300X150
EDCG-1120E	920	1150	1018	1273	1016	1270	1030	1288	102X118	2100X850X1240	2700X1300X150
EDCG-1220E	1020	1275	1120	1400	1096	1370	1200	1500	102X118	2100X850X1240	2700X1300X150
EDCG-1400E	1100	1375	1200	1500	1280	1600	1250	1562	102X118	2100X850X1240	2700X1300X150
EDCG-1500E	1200	1500	1320	1650	1360	1700	1300	1626	102X118	2100X850X1240	2700X1300X150



CUMMINS ENGINE

C-Series Generator (USA) sets with a power range from 20 Kva up to 2500 Kva is produced with Cummins Engine. High performance with the durability Cummins engine combined with high quality control system provide ideal solution for prime and standby power supply.

CUMMINS ENGINE (C-SERIES)

Generator set									Cummins Engine				Gen Set Physical Data				
MODEL	1500RPM(50Hz)				1800RPM(60Hz)				MODEL	1500RPM(50Hz)		1800RPM(60Hz)		BORE & STROKE (mm)	NO. OF CYLINDER	DIMENSION WxLxH(mm)	WEIGHT (KG)
	STANDBY		PRIME		STANDBY		PRIME			STANDBY (PS)	PRIME (PS)	STANDBY (PS)	PRIME (PS)				
	KW	KVA	KW	KVA	KW	KVA	KW	KVA									
EDG-28C/20C	22	28	20	25	20	25	18	23	X2.5G2/X2.5G4	38.5	34.7	38.5	34.7	91.7X127	4	1667x930x1247	442
EDG-33C/30C	26	33	24	30	30	38	27	34	X3.3G1/X3.3G2	49	44	56	48	91.7X127	4	1753x930x1256	580
EDG-38C/35C	30	38	28	35	35	44	32	40	X3.3G1/X3.3G2	49	44	56	48	91.7X127	4	1753x930x1256	640
EDG-44C/40C	35	44	32	40	40	50	36	45	S3.8G4/S3.8G8	59	53	59	53	97X128	4	2115x1044x1516	945
EDG-55C/50C	44	55	40	50	50	63	45	56	S3.8G6/S3.8G9	73	67	73	67	97X128	4	2115x1044x1516	955
EDG-90C	72	90	66	82	80	100	72	90	QSB5-G3	86	74	96	83	107X124	4	2104x1016x1255	1220
EDG-110C	88	110	80	100	100	125	90	113	QSB5-G5	105	90	119	90	107X124	4	2104x1016x1255	1270
EDG-175C	140	175	120	150	150	188	136	170	QSB7-G3	158	137	170	131	107X124	6	2656x1100x1549	1361
EDG-200C	160	200	144	180	176	220	160	200	QSB7-G4	180	154	198	150	107X124	6	2656x1100x1549	1361
EDG-220C	176	220	160	200	200	250	180	225	QSB7-G5	197	168	225	194	107X124	6	2656x1100x1549	1411
EDG-250C	200	250	180	225	230	288	210	263	QSL9-G2	226	196	263	227	114X145	6	3023x1270x1676	2234
EDG-275C	220	275	200	250	250	313	227	284	QSL9-G3	244	217	280	248	114X145	6	3023x1270x1676	2237
EDG-300C	240	300	220	275	275	344	250	313	QSL9-G4	265	234	306	270	114X145	6	3023x1270x1676	2370
EDG-330C	264	330	240	300	300	375	275	344	QSL9-G7	286	260	330	300	114X145	6	3023x1270x1676	2370
EDG-450C	360	450	327	409	400	500	355	455	QSX15-G4	385	348	419	383	114X145	6	3864x1524x1812	3992
EDG-500C	400	500	364	455	400	500	360	450	QSX15-G6	436	396	419	383	114X145	6	3864x1524x1812	4218
EDG-550C	440	550	400	500	500	625	450	563	QSX15-G8	477	426	419	383	140X152	6	3864x1524x1812	4452
EDG-750C	580	725	525	656	650	813	591	739	QSK23G5	640	564	709	627	170X170	6	4266x1879x2052	6387
EDG-900C	800	1000	728	910	900	1125	823	1029	QST30G3	866	786	963	910	140X165	12	4297x1685x2079	6117
EDG-1000C	880	1100	800	1000	1000	1250	910	1138	QST30G4	970	880	1112	1007	140X165	12	4571x1702x2332	7195
EDG-1250C	1120	1400	1020	1275	1250	1563	1125	1406	QSK50G2	1213	1074	1344	1172	159X159	16	5105x2000x2238	9099
EDG-1500C	1360	1700	1232	1540	1500	1875	1365	1706	QSK50G4	1428	1294	1601	1432	159X159	16	5690x2033x2330	10024
EDG-2000C	1600	2000	1460	1825	2000	2500	1825	2281	QST60G12	1688	1540	2120	1937	159X190	16	6175x2286x2537	14863



MTU ENGINE

M-Series of diesel genests are completed with MTU (Germany) engines and it is consist of high power range from 800 up to 2500 Kva. High quality and reliability, excellent fuel consumption and conformity to modern ecological standards are the main features of this series.

MTU ENGINE (M-SERIES)

Generator set									MTU Engine					Gen Set Physical Data			
MODEL	1500RPM(50Hz)				1800RPM(60Hz)				MODEL	1500RPM(50Hz)		1800RPM(60Hz)		BORE& STROKE (mm)	NO. OF CYLINDER	DIMENSION WxLxH(mm)	WEIGHT (KG)
	STANDBY		PRIME		STANDBY		PRIME			STANDBY (PS)	PRIME (PS)	STANDBY (PS)	PRIME (PS)				
	KW	KVA	KW	KVA	KW	KVA	KW	KVA									
EDG-800M	680	850	620	775	770	963	700	875	12V2000G65/85	1025	932	1173	1067	130X150	12	4520X1702X2221	6111
EDG-900M	800	1000	720	900	900	1125	820	1025	16V2000G25/45	1193	1086	1354	1227	130X150	16	4865X1783X2375	3983
EDG-1000M	880	1100	800	1000	1000	1250	910	1138	16V2000G65/85	1307	1193	1495	1354	130X150	16	4865X1783X2375	7328
EDG-1200M	980	1225	900	1125	1200	1500	1090	1363	18V2000G65/85	1475	1340	1756	1597	130X150	18	5036X2140X2495	7959
EDG-1600M	1450	1813	1300	1625	1600	2000	1400	1750	12V4000G23/43	2111	1903	2327	2038	170X210	12	6466X2152X2450	11337
EDG-2300M	2000	2500	1800	2250	2300	2875	2100	2625	16V4000G63/83	2929	2634	3351	3056	170X210	16	7300X2377X3285	15433



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