

GAS POWER SOLUTIONS

YDNPOWER



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Distributor

YDNPOWER

Weifang Yidaneng Power Co., Ltd.



ABOUT US

Weifang Yidaneng Power Co., Ltd. (<http://www.yidaneng.com/>) was established in 2009 with 36,000m². The company has a registered capital of 100 million yuan, a high-tech enterprise, and 14 patents related to generator sets.

The company has passed ISO9001, ISO14001, OHSAS18001, Saudi SASO, and CE for many years. The company has intensively cultivated industry segments, and at the same time increased its investment in innovation, and started in the field of gas power generation. In order to respond to energy conservation and emission reduction, new environmental protection products are developed. YDN brand natural gas generator sets, biogas generator sets, liquefied petroleum gas generator sets, biomass gas generator sets, etc. have been introduced. YDN is a cooperative production plant of Cummins gas engine, mainly responsible for the installation of the engine gas system, and the testing of the gas engine, and is the agent of Cummins GOEM as well.

Natural gas generator sets provide main and backup power sources for natural gas, gas stations, and oil fields; biogas generator sets are equipped with waste heat recovery equipment to provide power and heating for farms and biogas pools. It can not only make full use of resources and save costs, but also save energy and protect the environment. YDN Power has always been adhering to the corporate tenet of customer first and service first. The company pays attention to customer satisfaction and after-sales service. With the trust of customers and the support of international brands, YDN power will expand and strengthen gas generator sets and diesel generator sets persistently.

Strategic Cooperation Supplier



CERTIFICATE



CASE DISPLAY

WE HAVE SUCCESSFULLY INSTALLED

5000 POWER

PLANTS AROUND THE WORLD.

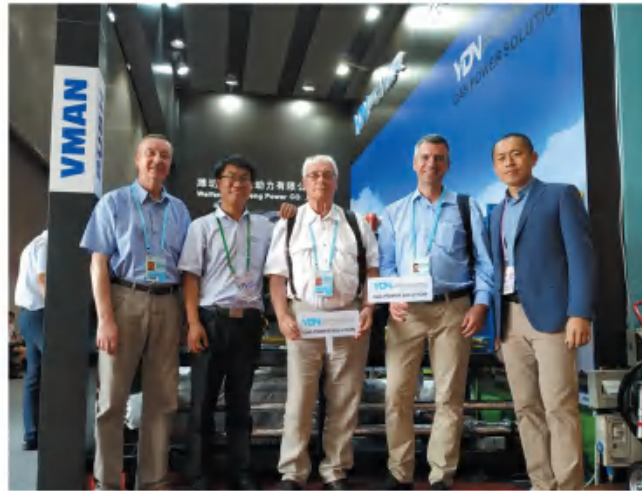


GENERATED
825MWH
ELECTRICITY.

COOPERATIVE CUSTOMERS



EXHIBITION



MEE IN DUBAI 2015 - 2019



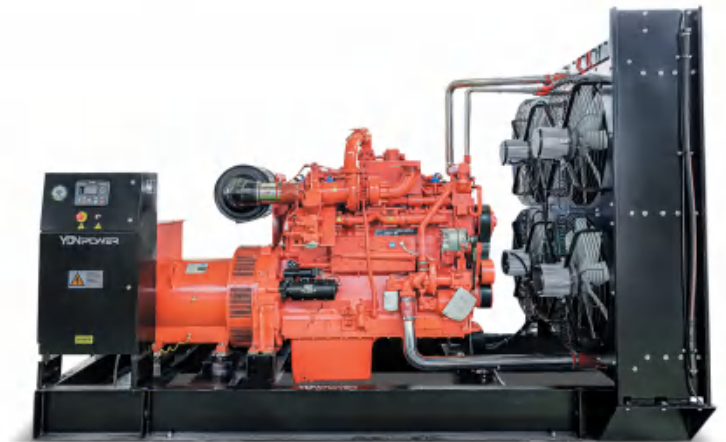
PAKISTAN POWER SHOW 2017



CUMMINS QSK19N-G1

GENERATOR SET REQUIREMENTS FOR NATURAL GAS :

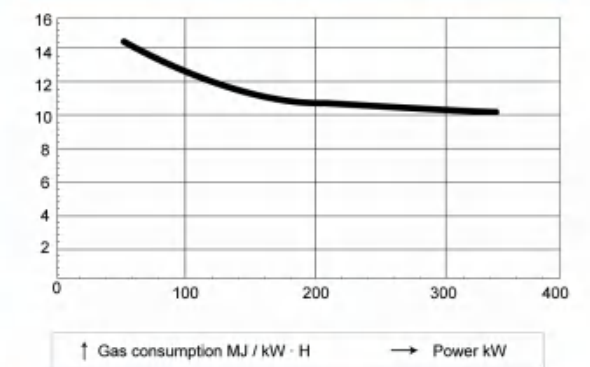
- ▶ The methane content should not be lower than 95%.
- ▶ The Natural gas temperature should be between 0-60 °C.
- ▶ No impurity should be in the gas. Water in the gas should be less than 20g/Nm³.
- ▶ Heat value should be at least 8500kcal/m³, if less than this value, the power of the engine will be declined.
- ▶ Gas pressure should be 3-100KPa, if the pressure is less than 3KPa, booster fan is necessary.
- ▶ The gas should be dehydrated and desulfurized. Make sure that there is no liquid in the gas. H₂S<200mg/Nm³.



300kW Cummins natural gas generator Set

Model		YDNQ-300
Rated Power (kW)		300
Rated current (A)		540
Rated Voltage (V)		220/380
Rated Frequency (Hz)		50/60
Size (mm)		3800*1600*2200
Weight (kg)		3700
Engine	Model	QSK19N-G1
	Type	Water-cooled, 4-stroke,6 cylinder in-line
	Rated Power(kW/kVA)	343
	Rated Speed(rpm)	1500/1800
	Cylinder No.	6
	Bore*Stroke(mm)	159×159
	Cooling Method	Water-cooled
	Oil Consumption(g/kW·h)	<1
	Gas Consumption(m³/h)	≤90
	Starting method	24V DC
Alternator	Brand	Farrand
	Model	FLD300
	Rated Power(kW/kVA)	300/375
	Voltage Regulation	≡±1
	Excitation mode	Brushless, Self Excitation
	Insulation Class	H
Control System	Model	Smartgen HGM6110
	Working Voltage	DC8.0V to DC35.0V
	Overall Dimensions	197 mm x 152 mm x 47mm
	Panel Cutout	186mm x 141mm
	Working Condition	Temperature: (-25~70)°C; Humidity: (20~90)%
	Weight	0.56kg

Gas consumption



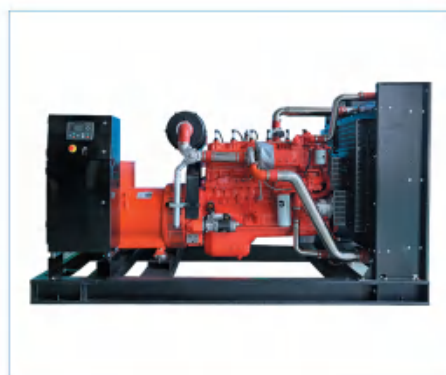
Power output			Gas consumption		Gas consumption rate	
%	BHP	kW	BTU/min	MJ/h	BTU/BHP.h	MJ/kW.h
100	460	343	54031	3420	7048	10.0
75	345	257	42347	2681	7365	10.4
50	230	172	30382	1923	7926	11.2
25	115	86	19463	1232	10155	14.3

* DATA SOURCES:

All the above data are based on or corrected to the conditions specified in ISO 3046 standard - altitude 110m (361ft.), atmospheric pressure 100KPa (29.53in. Hg), inlet temperature 25 °C (77 °F), relative humidity 30%, using pipeline natural gas with low calorific value of 905btu / cuft.



CUMMINS OTHER SERIES



GNT855



GTA19-G2



GTA38

Model	YDNC-250	YDNC-300	YDNC-500
Rated power (kW / kVA)	250 / 312.5	300 / 375	500 / 600
Rated current (A)	450	540	900
Rated Voltage (V)	230/400		
Rated Frequency (Hz)	50 / 60		
Dimension (mm)	3400*1400*2000	3800*1780*2080	5100*2500*2200
Weight (kg)	2930	3800	6500

Engine	Model	GNT855	GTA19-G2	GTA38
	Type	Water-cooled, 4-stroke, in-line		Water-cooled, 4-stroke, V shape
	Rated Power (kW/kVA)	300	360	550
	Rated Speed (rpm)	1500/1800		
	Cylinder No.	6	6	12
	Bore* stroke (mm)	140x152	159x159	
	Cooling Method	Water-cooled		
	Oil Consumption (g/kW·H)	<1	<1	<1
	Biogas Consumption (m³ / h)	150	180	300
	Natural gas Consumption (m³/ h)	75	90	150
Starting method	24V DC			
Brand	Farrand			

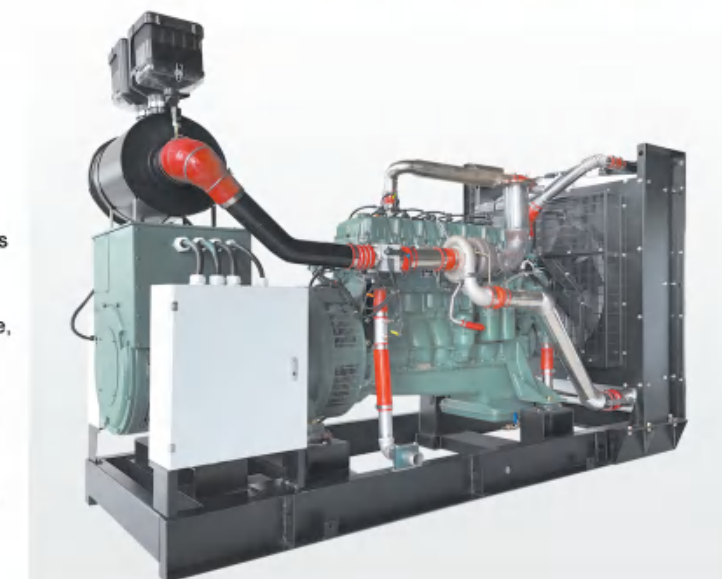
Alternator	Model	FLD250	FLD300	FLD500
	Rated Power(kw/kVA)	250 / 312.5	300 / 375	500 / 600
	Voltage Regulation	±1		
	Excitation mode	Brushless, Self Excitation		
	Insulation class	H		

Control System	Model	SMARTGEN HGM6110N
	Working Voltage	DC8.0V to DC35.0V
	Overall Dimensions	197mm x 152mm x 47mm
	Panel Cutout	186mm x 141mm
	Working Condition	Temperature : (-25-70) °C : Humidity : (20-90) %
Weight	0.56kg	

YDN GAS GENSET

GENERATOR SET REQUIREMENTS FOR BIOGAS:

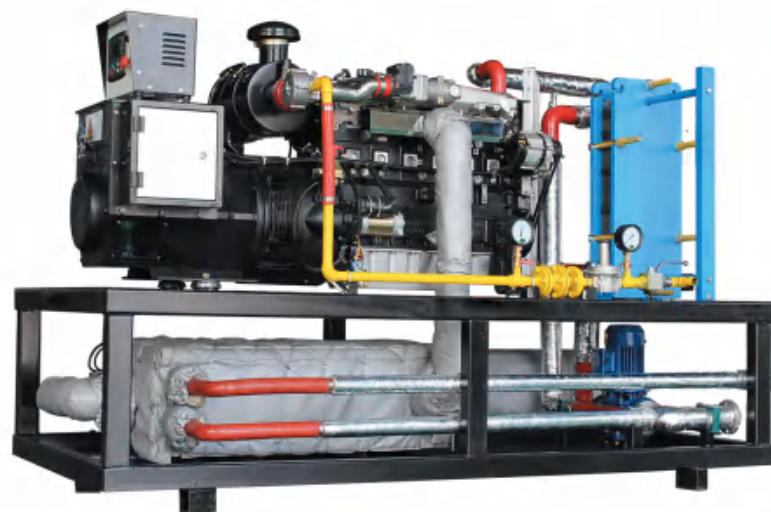
- ▶ The methane content should not be lower than 55%.
- ▶ The Biogas temperature should be between 0-60 °C.
- ▶ No impurity should be in the gas. Water in the gas should be less than 20g/Nm3.
- ▶ Heat value should be at least 5500kcal/m3, if less than this value, the power of the engine will be declined.
- ▶ Gas pressure should be 3-100KPa, if the pressure is less than 3KPa, booster fan is necessary.
- ▶ The gas should be dehydrated and desulfurized. Make sure that there is no liquid in the gas. H2S<200mg/Nm3.



Standby Power (kW/kVA)	Rated Power (kW/kVA)	Model	Brand	Rated Current (A)	Dimension (mm)	Weight (kg)
9/11	8/10	YDN-8YD	YANGDONG	14.4	1450×700×1100	500
11/13	10/12	YDN-10YD	YANGDONG	18	1450×700×1100	510
13/16	12/15	YDN-12YD	YANGDONG	21.6	1450×700×1100	510
16/20	15/18	YDN-15YD	YANGDONG	27	1700×720×1250	620
22/27	20/25	YDN-20YD	YANGDONG	36	1750×720×1250	650
27/34	25/37	YDN-25YD	YANGDONG	54	1750×740×1250	680
33/41	30/37	YDN-30YD	YANGDONG	54	1750×740×1250	680
55/69	50/62	YDNY-50	YTO	90	2800×1850×2380	1600
66/82	60/75	YDNY-60	YTO	108	3250×1200×1630	1600
88/110	80/100	YDNY-80	YTO	144	3250×1200×1730	1750
110/137	100/125	YDNY-100	YTO	180	2450×900×1500	1750
132/165	120/150	YDNY-120	YTO	216	2250×900×1530	2100
132/165	120/150	YDNV-120	VMAN	216	2850×1400×1950	2500
165/206	150/187	YDNY-150	YTO	270	2750×970×1650	2100
165/206	150/187	YDNV-150	VMAN	270	2850×1400×1950	3200
220/275	200/250	YDNV-200	VMAN	360	2850×1400×1950	3200
220/275	200/250	YDNCM-200	CAMC	360	3300×1400×1850	3200
220/275	200/250	YDNF-200	FAW	360	3980×1800×2500	3200
275/344	250/312.5	YDNV-250	VMAN	450	3410×1700×2100	4400
275/344	250/312.5	YDNCM-250	CAMC	450	3300×1400×1850	3200
275/344	250/312.5	YDNF-250	FAW	450	3980×1800×2500	3200
330/412	300/375	YDNV-300	VMAN	540	3410×1700×2100	4400
396/495	360/450	YDNV-360	VMAN	648	4300×2110×2500	4500
440/550	400/500	YDNV-400	VMAN	720	4300×2110×2500	4500
495/619	450/562.5	YDNV-450	VMAN	810	4300×2110×2500	4800

BRIEF INTRODUCTION OF GAS COGENERATION UNITS (CHP)

Gas cogeneration units mainly use natural gas as fuel for internal combustion engines to generate electricity. The heat from exhaust heat and cylinder liner is recovered to provide hot water or steam for daily life and industrial production.



The gas cogeneration unit is composed of gas engine, AC alternator, heat recovery system and control system. The mechanical energy generated by the combustion of gas in the internal combustion engine drives the alternator to output 380V three-phase AC electricity, which can be for both self-use and power grid. The high temperature (550-600℃) exhaust gas and the cylinder liner water (80-90℃) can produce high temperature hot water (<85℃) through the waste heat recovery system for domestic hot water or winter heating.

Advantages of Cogeneration Units:



High comprehensive efficiency and energy saving

Gas cogeneration system has higher power and heat generation efficiency and can significantly reduce fuel costs. The heat generated can be used entirely for domestic hot water or heating, the electricity generated can be used for relevant engineering sites, and the surplus electricity can also be sent to the power grid, which can provide additional benefits and high independence in the volatile energy market.



Environmentally friendly, carbon emissions reduction

Gas cogeneration units can save up to 40% of primary energy and reduce carbon dioxide emissions by 60% compared with traditional power generation methods. Compared with other fuels, natural gas burns with the lowest carbon dioxide emissions.



Compact structure, less space demand

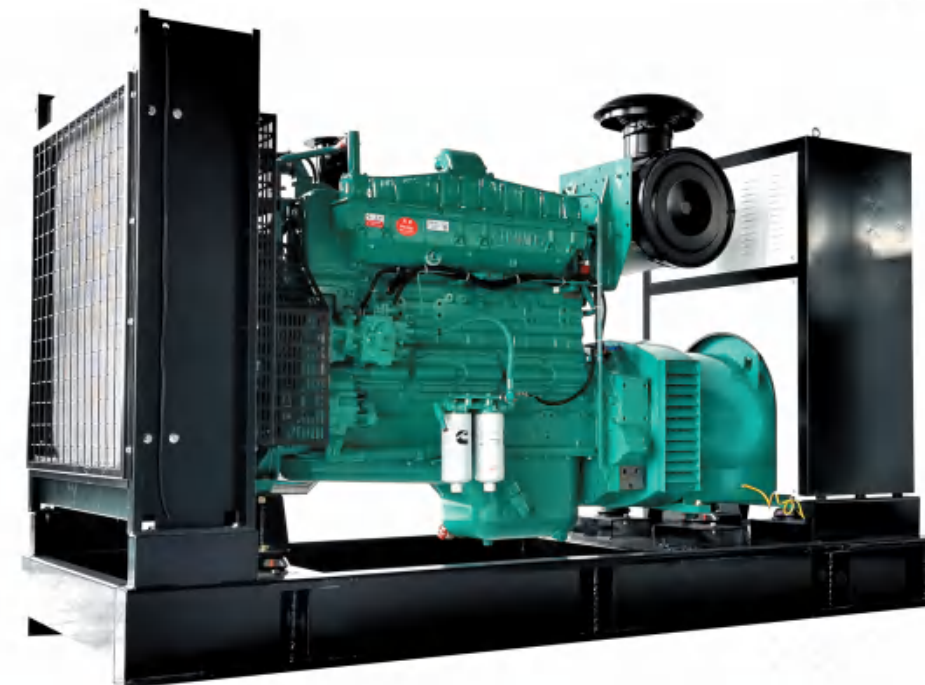
The compact structure allows the most efficient conversion of engine power and combustion heat into electrical and thermal energy. Integrated design, compact structure, reasonable layout, the space occupied by units in the building is minimized, which will reduce the cost of installation and connection of units.



Easy operation and smart control

Heating capacity and power output can be automatically adjusted. It can supply power synchronously with the power grid and automatically track the frequency of the power grid to ensure the safety of power supply.

DIESEL GENSET



Model	Rated Power (kW)	Motor Capacity (kVA)	Engine Model	Fuel Consumption Power (g/kW.h)	Engine		Rated Current (A)	Unit weight (kg)	Overall Dimension (mm)
					1H Power	Displacement			
DF*FLD100GF	100	125	6BTA5.9-G2	211	116	5.9	180	1280	2620*800*1500
DF*FLD120GF	120	150	6BTA5.9-G2	208	130	5.9	216	1300	2620*800*1500
DF*FLD130GF	130	162.5	6BTA5.9-G12	208	155	5.9	234	1300	2620*800*1500
DF*FLD150GF	150	187.5	6CTA8.3-G2	210	180	8.3	270	1600	2680*855*1560
DF*FLD180GF	180	225	6CTA8.3-G2	210	203	8.3	324	1700	2900*1045*1640
DF*FLD200GF	200	250	6LTA8.9-G2	197	240	8.9	360	1900	2900*1045*1780
DF*FLD200GF	200	250	6LTA8.9-G3	197	250	8.9	360	1900	2900*1045*1780
DF*FLD230GF	220	275	6LTA9.5-G3	209	280	8.9	396	2000	2900*1045*1780
DF*FLD250GF	250	312.5	6LTA9.5-G1	210	320	8.9	450	2000	3400*1360*200
DF*FLD300GF	300	375	6ZTA13-G3	204	380	13	540	3220	3400*1360*2000
DF*FLD350GF	350	437.5	6ZTA13-G2	204	415	13	630	3220	3400*1360*2010
DF*FLD360GF	360	450	6ZTA13-G4	193	415	13	648	3220	3400*1360*2010
DF*FLD400GF	400	500	QSZ13-G2	193	440	13	720	3220	3400*1360*2010
DF*FLD400GF	400	500	QSZ13-G5	193	470	13	720	3220	3400*1360*2010
DF*FLD450GF	450	562.5	QSZ13-G3	193	470	13	810	3220	3400*1360*2010
CQ*FLD200GF	200	250	NT855-GA	195	254	8.3	360	3100	3900*1400*2200
CQ*FLD250GF	250	312.5	NTA855-G1A	195	291	14	450	3150	3900*1400*2200
CQ*FLD280GF	280	350	NTA855-G1B	195	321	14	504	3230	3900*1400*2200
CQ*FLD300GF	300	375	NTA855-G2A	195	343	14	540	3300	3900*1400*2200
CQ*FLD300GF	300	375	NTA855-G4	201	351	14	540	3300	3900*1400*2200
CQ*FLD330GF	330	412.5	KTA19-G2	201	370	14	594	4200	4500*1800*2200
CQ*FLD350GF	350	437.5	NTAA855-G7	201	377	14	630	3580	4200*1600*2200
CQ*FLD360GF	360	450	NTAA855-G7A	206	407	14	648	3580	4200*1600*2200
CQ*FLD400GF	400	500	KTA19-G3	206	448	19	720	4200	4500*1800*2200
CQ*FLD450GF	450	562.5	KTA19-G2A	206	504	19	810	4200	4500*1800*2200
CQ*FLD450GF	450	562.5	KTA19-G4	206	504	19	810	4200	4600*1800*2200
CQ*FLD500GF	500	625	KTAA19-G5	206	555	19	900	4420	4800*1800*2200
CQ*FLD500GF	500	625	KTAA19-G6	207	570	19	900	4530	4800*1800*2200
CQ*FLD500GF	500	625	KTA19-G8	207	575	19	900	4530	4800*1800*2200
CQ*FLD550GF	550	687.5	KTA19-G6A	207	610	19	990	4530	4800*1800*2200
CQ*FLD560GF	560	700	KTA38-G	213	615	38	1008	7500	20GP
CQ*FLD600GF	600	750	KTA38-GA	204	711	38	1080	7500	20GP

DISTRIBUTION CABINET

GGD AC low-voltage distribution cabinet is adopted. It has the characteristics of high segmentation capacity, good dynamic and thermal stability, novel and reasonable structure, practical electrical scheme, strong seriality, high protection registration, etc. It can be used as an updated product. GGD distribution cabinet is applicable to power plants, substations, industrial and mining enterprises and other power users as the power distribution system with AC 50Hz and rated working voltage of 380V. It is used for power conversion, distribution and control of power, lighting and distribution equipment. The product has the characteristics of high segmentation ability, good dynamic and thermal stability and strong applicability.



The cabinet is equipped with intelligent universal circuit breaker, which is applicable to the distribution network with AC 50Hz, rated voltage of 660V (690V) and below and rated current of 630A ~ 6300A. It is used to distribute electric energy and protect lines and power equipment from overload, undervoltage, short circuit, single-phase grounding and other faults. The circuit breaker has intelligent protection function and accurate selective protection, which can improve the reliability of power supply and avoid unnecessary power failure. At the same time, it has an open communication interface, which can carry out "four remotes" to meet the requirements of control center and automation system.



SOUND-PROOF CANOPY



Customizable

Sound-proof canopy could be customizable according to exact requirements from customers.



Advanced Technique

Advanced noise reduction technology and qualified sound absorbing material applied to make sure all your sound-proof standard could be successfully met.

DESULFURIZATION SYSTEM

BRIEF INTRODUCTION:

The dry desulfurization system is a standardized desulfurization process professionally designed and manufactured according to the user's hydrogen sulfide content in the gas, actual gas volume, required service cycle and relevant data. The overall dimensions and internal structure are specially designed. The desulfurization equipment designed for different types of gases, hydrogen sulfide content in different gases and different gas pressures have different dimensions and internal structures. The design and manufacture of dry desulfurization equipment must meet the process requirements. In biogas power generation, combined with the actual demand of biogas power generation, the biogas shall be subject to systematic desulfurization, dehydration and other purification treatment. Desulfurization adopts the combination of physics and chemistry, and dehydration adopts mechanical and gas-water separation membrane technology. It has the advantages of high efficiency and simplicity of the whole desulfurization and dehydration process equipment, convenient management, low cost of desulfurization equipment, long service life, reliable operation and high desulfurization efficiency. The desulfurization system is suitable for gases with low hydrogen sulfide content, small treatment gas volume and high desulfurization accuracy, especially the best guarantee for making good use of the generator.



REMOTE MONITORING SYSTEM

BRIEF INTRODUCTION:

The remote monitoring system adopts Zhongzhi cmm366a-4g cloud monitoring communication module. The cloud monitoring communication module is a 4G all network wireless network communication protocol conversion module, which can connect the generator set (with serial communication interface) to the Internet. After the module logs in to the ECS, the ECS will transmit the corresponding generator set controller communication protocol to the module. The cloud monitoring module can obtain the data information of the generator set through RS485 interface, USB interface, link interface or RS232 interface, and transmit the obtained data information to the corresponding ECS through 4G wireless network. The user can use mobile app (IOS or Android system) Computers and other terminal equipment monitor the operation status of the generator set in real time and query the operation records of the generator set.



The module has GPS positioning function, and uploads the obtained longitude, latitude and altitude information to the corresponding cloud server in real time.