



# Fischer Panda®

MOBILE POWER SYSTEMS



**For Military  
Applications**



**About this brochure:** Modern military systems require highly efficient and reliable power sources in order to function during intense operations and in harsh conditions. Fischer Panda generators and ECU systems meet this requirement. This brochure outlines the main types of generators, an overview of their main application areas and shows a selection of the models currently in military service. Please call the Fischer Panda Military Team at; (1) 954-462-2800 or Visit our website at: [www.fischerpanda.com/military](http://www.fischerpanda.com/military) for more information and data sheets.

## 1. Powering your Defenses

The rising demand for mobile and high-quality power systems.

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## 2. Fischer Panda Generators

With over 30 years experience in mobile power supply, Fischer Panda Generators are robust, compact and designed for mission critical applications.

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## 3. Small, Light, Quiet

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# POWERING YOUR DEFENSES



## The Demand for Power

The use of modern electronics, communications and surveillance systems, access to real time tactical information and logistic support have dramatically increased the mobility and responsiveness of today's modern armed forces. Wheeled and tracked vehicles have become the chosen platform for deploying powerful electronic systems. Fischer Panda Generators are suited for mobile units requiring an efficient and robust power supply while operating independently for long periods.

Smaller, more mobile units are required to undertake diverse roles and their mission profiles have been dramatically expanded: executing offensive and defensive combat missions, sustaining prolonged operations, providing disaster relief and supporting aid agencies during peace-keeping tasks at short notice anywhere in the world. Such operations involve many small units spread over a large area. Reliable power sources are critical for command, communications, intelligence and tactical systems to ensure that they can operate effectively and accomplish the mission.

Specialist teams deploying power hungry equipment can operate away from base areas so force commanders can utilize them to the best effect.

Reliable electricity supply is the life blood of modern mobile forces as electronic systems play a central role in supporting battlefield operations from the strategic level, through joint service deployment, to tactical units operating in all areas of the battle space.

## The Requirement

Generators must be capable of running 24 hours a day, 7 days a week and be totally reliable. The generator must start at below -49° F (-45° C) and work reliably and with high efficiency up to at least 131° F (55° C) or 3000 meters above sea level. Sandstorms, rain or snow should not have any adverse effect on generator. Acoustic, electronic and thermal signatures must all be low. Easy access for maintenance is vital and a long operational life is demanded with comprehensive first-rate support.

## Meeting the Requirement

Fischer Panda Generators are designed and built specifically for mobile applications. The aim is to provide efficient and reliable power under harsh and extreme conditions. The modular nature of the generators means they can be built as fully self-contained units in a number of configurations, or installed around the vehicle depending on the space available and the role.

The Fischer Panda AC alternators supply electricity with a very clean sine wave suitable for sensitive electrical equipment. They are also capable of providing sufficient power for starting heavier equipment such as environmental control units (ECUs). Fischer Panda DC generators enhance lighter vehicle systems with powerful charging capabilities enabling indefinite silent running. Using liquid cooling and operating within a sound-insulated housing all generators are very quiet, are almost vibration free and have minimal thermal signatures which makes them ideal for front line operations.

Parallel load switching and parallel load sharing are available to enable the generators to function as decentralized power assets to manage peak demands for power during operations by combining the power output or swapping the load to sustain supply.

# FISCHER PANDA GENERATORS



## Company Profile: Fischer Panda Generators

Fischer Panda Generators is a solution provider of Mobile Power Systems for Defense applications with a 20-year track record and operations in the US, Germany and Poland. We have custom-designed a diverse selection of quiet and lightweight diesel power systems as well as hybrid systems.

### Fischer Panda Generators and APUs for Military Applications:

Our diverse selection of diesel power systems meets a wide range of environmental and MIL-STD requirements, including those related to EMI levels, IR signatures, exhaust emissions, and operating sound levels. Designed for ease of maintenance, our generators can be custom engineered to meet specific mission requirements by our professional and qualified engineering staff.

### Fischer Panda Design:

Our comprehensive internal design engineering team in the US, Germany and Poland is highly qualified and experienced in unique and custom designs. Fischer Panda is fully export-compliant and registered with the US State Department

### Fischer Panda Technical Service and Support:

Fischer Panda USA is fully staffed with qualified engineers and highly trained technicians to ensure prompt and effective assistance. Our support team can often resolve issues via phone or email, utilizing photos and direct interaction with technicians. We can also reset mission equipment to factory specifications.

### Sample of Platforms using Fischer Panda Products:

LAV	Trojan Spirit	M88
AAV	MEADS	M113
UUV	SEALION III	M577
PQAS-E	MBL 47	Aerostat

## Designed and Built for Extreme Conditions

Fischer Panda has a full military specification for its generators and is experienced with designing and constructing generators to a wide range of MIL-STD requirements especially concerning EMI levels and IR signatures, exhaust emissions and operating sound levels. Custom-built generators can be constructed as practically all the main components are manufactured by Fischer Panda. Generators are subject to an intensive quality and testing regime ensuring that specifications are met.

The use of liquid cooling for engine and alternator ensures optimal operating temperatures are maintained. The generators are compact and enclosed within a sound insulated capsule which reduces operating noise and simplifies installation. They are designed with fast and easy maintenance in mind, whatever the conditions or circumstances, which is essential for the military operator.

	CH-47D Helicopter	110db(A)
	UH-60 Blackhawk	106dB(A)
	M88A1E1 vehicle 15mph	105db(A)
	M2/A2 Bradley	74-95 dB(A)
	M113 APC 25mph	85-92db(A)
	PLS system 16.5 ton all speeds up to	85db(A)
	HMMWV up to 50mph	less than 85db(A)
	Dispatch rider	80 dB(A) @ 7m
	Medium air compressor	70 dB(A) @ 7m
	<b>Fischer Panda Generators</b>	<b>55-65 dB(A) @ 7m</b>
	Briefing	40-50 db(A)
	Reconnaissance patrol	20db(A)



Operating in sub-zero temperatures



- Operating in sub-zero temperatures
- Vibration free operation
- Intensive quality and testing regime
  
- Liquid cooling for engine and alternator
- Encapsulated system - no contamination
- Compact, rugged design
  
- Optional configurations for requirements
- Operate with a wide range of fuel types
- -40° C to + 60 °C constant operation

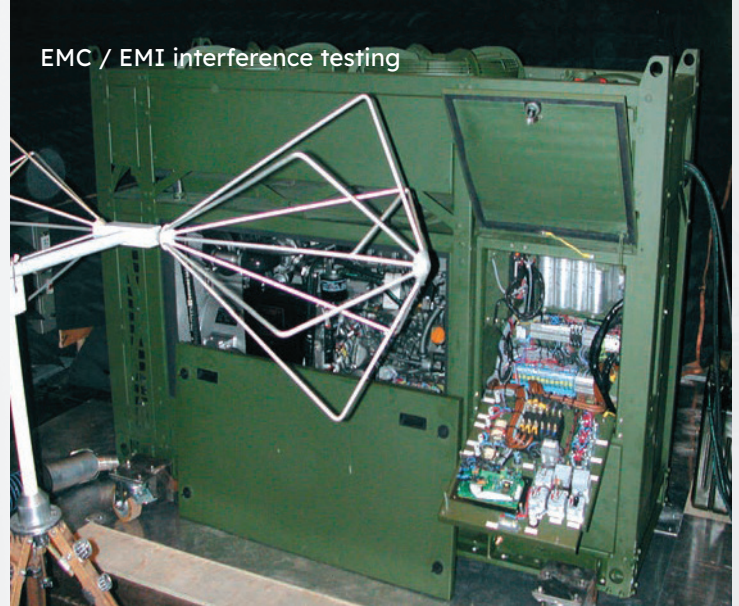
### **MIL-STD-810G:**

- 501.5, Prcd. I, II, High Temperature
- 502.5, Prcd. I, II, Low Temperature
- 503.5, Prcd. I, D, Temperature Shock
- 505.5, Prcd. I, Solar Radiation (Sunshine)
- 506.5, Prcd. II, Rain
- 507.5, Prcd. II, Humidity (95% rel. hum.)
- 510.5, Prcd. I, II, Sand and Dust
- 514.6, Prcd. I, Vibration

### **MIL-STD-416F:**

- RE102, Radiated Emissions, Cat. Navy Mobile & Army
- CE102, Conducted Emissions, Basic Curve
- CS101, CS114, CS115, CS116, Conducted Susceptibility
- RS103, Radiated susceptibility

EMC / EMI interference testing



- Meet all emission regulations
- Low thermal Signature
- Meet EMC/EMI milspecs:
  
- 3000 meters standard military operating altitude (AMSL)
- Able to meet custom design requirements
- Very high reliability
  
- Easy to operate and maintain
- Rain and humidity testing
- Offer technical, installation and operator training
  
- Detailed handbooks
- Sound ILS base
- Comprehensive worldwide support

## Modular Design for Installation Flexibility

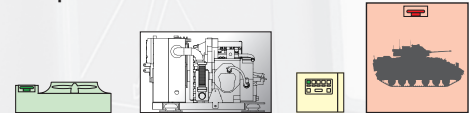
Fischer Panda Generators are compactly constructed and highly suited for applications which have limited installation space available. Generators are available for internal installation within the vehicle and external mounting on the chassis. The modular nature of the Fischer Panda generators makes them particularly suited for use on vehicles especially when space is a critical factor. An externally mounted radiator provides effective cooling for generators installed inside the vehicle. Radiators can be mounted above, below or on the side of the vehicle.

### Generators/APUs for Internal Installation



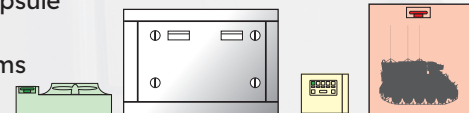
Suitable for internal mounting in very tight spaces such as engine bay, fender or compartment. The generator is generally connected to vehicle fuel system. Requires an external radiator for cooling.

- Connects to vehicle or separate fuel supply
- Ideal for upgrading power supply systems
- Optional integrated compressor or motor

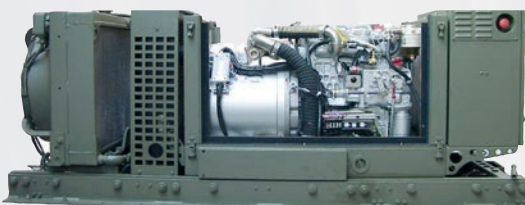


Generators in a rugged sound insulated capsule for installation in internal area or externally on the chassis. Liquid cooling for engine and generator (plus internal exhaust silencer optional) keep exhaust temperatures low. The generator is generally connected to vehicle fuel system and requires an external radiator for cooling.

- Suitable for internal and external mounting
- Sound insulation capsule
- Ideal for upgrading power supply systems

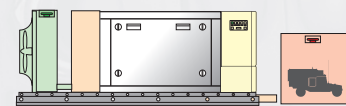


### Super-Silent Technology Generators

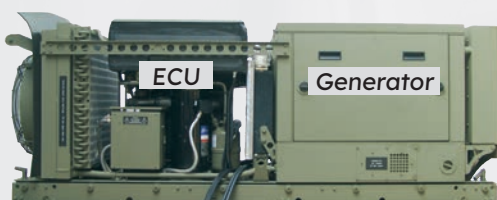


SST "Super Silent Technology" Generators for mounting in enclosed area such as HMMWV tunnel. Generators can be connected to vehicle fuel tank and start batteries for lowest overall weight.

- Super-silent Tunnel Generators
- Suitable for shelter tunnels
- Mounted on telescopic slides

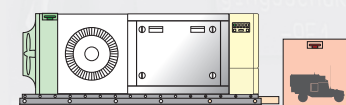


### SST Combo Generators



Combining compact generator and integrated ECU into single unit. Major components are fitted together on telescopic frame for mounting in shelter. Fuel is supplied from vehicle tank.

- Suitable for shelter tunnels
- Mounted on telescopic slides
- Integrated ECU



## SMALL, LIGHT, QUIET

### Power Systems for Integrated Vehicle Operations

Armored tracked vehicles for command, and control role are becoming of increasing importance not only for mobility on rough terrain but also in operations where light armored wheeled vehicles have proven to be very vulnerable. They form the first major communications link for troops in contact operations.

Fischer Panda AGT (Advanced Generator Technology) power units (APU) are driven by liquid-cooled diesel engines and are designed to supply high quality DC direct to the on-board power system allowing equipment to be powered independent of the vehicle's engine or any other external energy source. The batteries are charged automatically in a very short time which makes the most economical use of fuel while maintaining full combat capability

If there is absolutely no room for a sound insulation capsule, the generator may be installed in a very tight equipment compartment inside the hull. The modular design makes it possible to distribute the generator's major components throughout the vehicle wherever space is available

Generators for installation outside the vehicle are housed in a sound insulated capsule which reduces operating sounds to an absolute minimum, and functions as an efficient heat insulator. This reduces infrared signatures to a very low level

The generators make use of permanent magnetic technology and have the highest efficiency and reliability currently available. Fischer Panda AGT APUs are available in many different versions for military applications with liquid or air-cooled diesel engines and with or without sound insulation capsule.

The PE-150 N series has been developed specially for upgrading the M577 and M113 Command Post variants with either attached or external radiators. The nominal voltage is 28 V DC and the unit is driven by a high-quality liquid-cooled diesel engine. The speed is variable from 2.000 to 2.400 rpm according to the required power and the sound emission is only 55 dBA at a distance of 7 meters which makes the generator completely inaudible beyond 20 meters. The generator charges the vehicle batteries automatically with very high efficiency and consumes approx. 1.5 liters/hour. The electronic voltage controller regulates both the charging rate and voltage accurately according to the battery condition. Maximum charge rate is normally 360 Amps.

### C3 (Command, Control, Communication)





## Power for General Purpose Applications

Fischer Panda Generators are generally suited to a wide range of applications operating from towed, shelter-based, container, mobile and semi-static locations that are not connected to the local grid or managed by on-site power utilities. A range of installation and mounting options are available when weight and space restrictions are challenging.

The generators are available in a wide range of voltage and frequencies for supplying continuous power for applications supplying lighting, air conditioning, heating devices, filtering and ventilation devices, air compressors and pumps for air circulation and flow and shelter pressurizing systems, hydraulic pumps, power tools and battery charging.

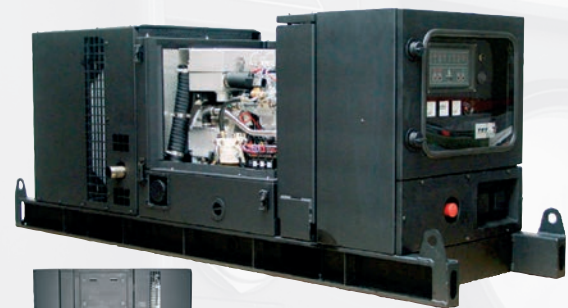
Fischer Panda Generators can be found worldwide supplying power to mobile petrochemical laboratories, repair and maintenance units, intelligence and data analysis, mobile surgeries, field hospitals, fire fighting vehicles, coastal vessels, health centers, disaster control and emergency relief agencies.

The generators are fitted within a sound insulated capsule, this ensures that operators are not disturbed while working, even less than a meter from the generator and low signatures reduce the possibility of detection.

Extreme weather conditions such as heat and terrain can take a high toll on material. The liquid-cooled Fischer Panda Generator does not require hot and dusty air to keep cool while operating. This means a long and trouble-free life for the equipment.



Complete unit, cooling, fuel, generator and electrical systems all mounted on frame. Vertical mounted radiator is rotated 90°, for cooling efficiency in high side trailer.



Complete unit, cooling, fuel, generator and electrical systems. Trailer mounted on frame with forklift pockets and lifting eyes.



## Parallel Power – Scalable Power Systems

Installing two generators in parallel to operate together has two main advantages. Either they can be run together which will provide the system with twice as much power with enough supply for very demanding peak periods or the load can be switched from one generator to the other without having to switch off the entire system.

Two generators allow unexpectedly large loads or longer peak periods of demand to be covered. When the demand drops back to the normal level, only one smaller generator is required to run which is more efficient than running a larger generator with a low load.

When power is required for very long periods of time, the second generator can be started and brought “online” to take over from the first. The first generator can then be safely switched off for maintenance purposes without having to shut down the entire power system. If the primary power generator fails, a second generator is always available to supply the power without having to rely on a backup system with reduced capacity. This is suited for applications which may require a full energy supply in reserve.

### Parallel system benefits

- Switch loads from one generator to the other without shutting down complete system
- Always one generator ready to supply the system in reserve
- One smaller generator can efficiently cover lower power demands
- Peak periods - cover demanding peak periods by running generators together
- Flexible - when not enough room for a single large generator is available

### Parallel operation - load switching

Up to 4 (four) Fischer Panda AC generators can be connected together to operate as one unit. This system does not feature full load-sharing capabilities for safety reasons and to keep the system simple to operate. The generators' output is synchronised and either combined or switched from one generator to the other. To increase operational safety both generators are shutdown if a system failure occurs.

## SST 25 kW PMG Generator Three Phase 120/208 VAC



## Mobile Power Systems

### DC Air-Cooled Generators/Auxiliary Power Units (APU)

Fischer Panda AGT (Advanced Generator Technology) generators are powerful battery charging generators. These DC generators bring together in one package state of the art permanent magnet technologies, the super quiet signature of all Fischer Panda

#### Fischer Panda AGT 2500L DC Generator

The Fischer Panda AGT 2500L Generator is an air-cooled DC generator that supplies 28V. The generator supplies a 79 A charging current to charge a 24 V battery bank. An output connection is fitted on the top of the generator housing. The diesel generator is designed to be connected to an external fuel supply and is enclosed within a robust sound insulation housing.

**Scan QR code for complete data sheet or visit our website**

##### Features Include:

- 72 dBa at 7 meters
- External control panel mounted inside vehicle
- Auto start/stop
- Emergency automatic shutdown for low oil pressure, high coolant, winding and oil temp, short circuit overload



#### Fischer Panda AGT 3500L DC Generator

The Fischer Panda AGT 3500L Generator is an air-cooled DC generator that supplies 28V. This diesel generator supplies a 120 A charging current to charge a 24 V battery bank. An output connection is fitted on the top of the generator housing. It has an integrated fuel tank with a capacity of 5 liters which is mounted on the top of the frame. An option is available for operation using an external fuel supply. **Scan QR code for complete data sheet or visit our website**

##### Features Include:

- 75 dBa at 7 meters
- External control panel mounted inside vehicle
- Auto start/stop
- Emergency automatic shutdown for low oil pressure, high coolant, winding and oil temp, short circuit overload



### DC Liquid-Cooled Generators/Auxiliary Power Units (APU)

Fischer Panda DC generators enhance vehicle systems with powerful charging capabilities and enabling silent running. The AGT5000 PE-150 Series, for example, is perfect for automatically maintaining battery systems onboard M113 and M577 tracked vehicles. Fischer Panda has DC APUs in use on a number of other vehicles among which include the LAV, AAV and M88. **Scan QR code for complete data sheet or visit our website**

### AGT4000 PVMV-N Mobile DC Generator/APU

#### Features Include:

- 59 dBA at 7 meters
- External control panel can be mounted inside vehicle
- Auto Stop/Start
- Emergency automatic shutdown for low oil pressure, high coolant, windings and oil temp, short circuit overload
- Manual emergency stop and battle short switch
- Liquid-cooled muffler
- A reduced heat signature due to the Fischer Panda liquidcooled exhaust muffler and the complete encapsulation of the generator
- EMI Hardened



Control Panel



Auxiliary Power Unit (APU)



Radiator



## AGT5000PE-150N Mobile DC Generator/APU

Originally designed for the M113 and M577 vehicles, the Fischer Panda AGT5000 DC generator/APU incorporates state of the art permanent magnet technologies, the super silent signature of all Fischer Panda generators and our parameter controlled auto start/stop functions ensuring the power needed for the mission. **Scan QR code for complete data sheet or visit our website**

### Features Include:

- 55 dBa at 7 meters
- Auto start/stop
- Emergency automatic shutdown for low oil pressure, high coolant, windings and oil temp, short circuit overload
- Manual emergency stop switch and battle short switch
- Control Panel in the generator capsule
- External control panel can be mounted inside vehicle
- A reduced heat signature due to the Fischer Panda liquid-cooled exhaust muffler and the complete encapsulation of the generator.
- EMI Hardened
- Over 250 hours between service intervals
- Unique sloped design which facilitates unrestricted vision
- Relocatable Radiator Section

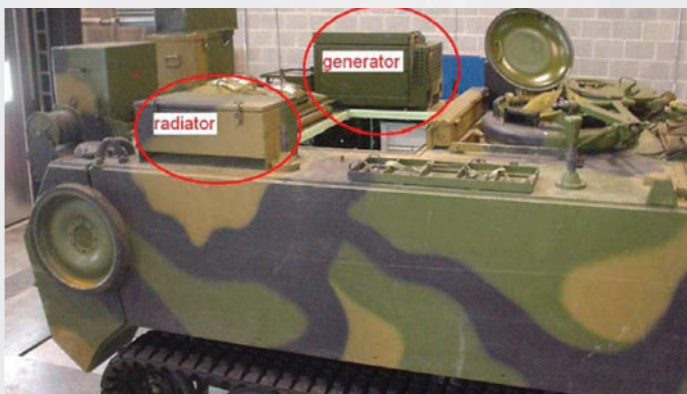


### Auxiliary Power Unit (APU)



Control Panel

Batteries



### AGT 6000 PVMV-N DC Generator/APU

This is a 28VDC Generator that was designed for backup power in surveillance sites located in remote areas. The AGT-6000-24VPVMV--N incorporates state of the art permanent magnet technologies. This generator can be remotely operated, diagnosed and monitored through its serial communication system, which gives the operator the security of knowing the operational parameters of the generator and significantly reduces the need for site visits. **Scan QR code for complete data sheet or visit our website.**

#### Features Include:

- Less than 72 dBA @ 1 meter
- Remote start, monitor and diagnostic capability.
- Emergency warning and shutdown
- CANbus operation



Courtesy Anduril\*

## AC Liquid-Cooled Generators

Fischer Panda AC generators supply power with a very clean sine wave suitable for sensitive electrical equipment. They are also capable of providing sufficient power for starting heavier equipment such as environmental control units (ECUs). The asynchronous generators can load switch but not load share.

### SST 10Kw Tunnel Generator Single Phase 120/240VAC and SST 10kW Tunnel Generator Three Phase 120/208VAC

The Fischer Panda SST 10kW is compact, quiet and powerful. Designed to fit within the HMMWV SICPS System, the SST 10kW has taken the decibel level down to 57 dBA at seven meters. A trailer mount version is also available upon request.

In addition, Fischer Panda Generators are the only 100% liquid-cooled asynchronous generators available in the United States that liquid cool both the engine and the alternator. The rotor has no windings, brushes or diodes as is the case with conventional synchronous generators. With fewer moving parts, perfect rotor balance, a sealed long-life stator and a nearly perfect sine wave the SST series is an ideal solution for all your mobile mission requirements. **Scan QR code for complete data sheet or visit our website**



SST 10 SINGLE PHASE



SST 10 THREE PHASE

#### Features Include:

- 57 dBA at 7 meters
- EMI hardened
- Digital diagnostic control panel
- 759 lbs. (wet) with no sound abatement needed in the shelter
- Emergency automatic shutdown for low oil pressure, high coolant, windings and oil temperature, short circuit overload
- Manual emergency stop and battle short switch



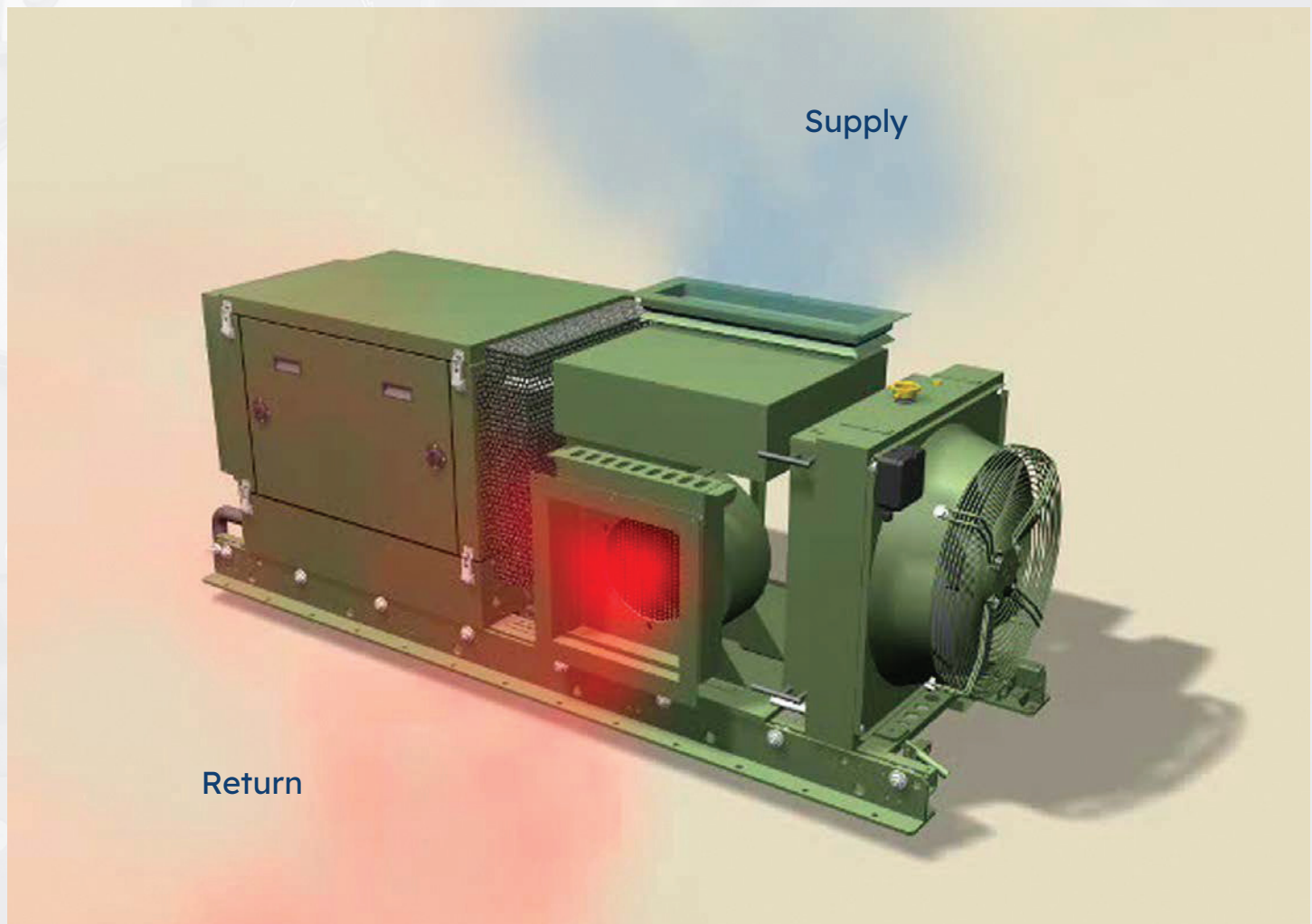
### COMBO SST 10kW Generator & 2 Ton ECU Single Phase 120/240VAC

The Fischer Panda SST 10kW combination generator with 2ton ECU (Environmental Control Unit) integrates the silence and efficiency of our shelter 10kW generator system with air conditioning technology, all designed to fit in the tunnel of a 788 shelter.

Though integrated on a single framework, the ECU is designed to run independently so it is ready for generator power or shore power. **Scan QR code for complete data sheet or visit our website**

#### Features Include:

- 57 dBa at 7 meters
- EMI hardened
- Digital diagnostic control panel
- 937 lbs. (wet) with no sound abatement needed in the shelter
- Emergency automatic shutdown for low oil pressure, high coolant, windings and oil temperature, short circuit overload
- Manual emergency stop and battle short switch





## SST18kW Tunnel Generator Three Phase 120/208VAC

The Fischer Panda SST 18kW is compact, quiet and powerful. Designed to fit within the HMMWV SICPS System, the SST 18kW has taken the decibel level down to 57 dBa at 7 meters. A trailer mount version is also available upon request.

In addition, Fischer Panda Generators are the only 100% liquid-cooled asynchronous generators available in the United States that liquid cools both the engine and the alternator. The rotor has no windings brushes or diodes as is the case with conventional synchronous generators. With fewer moving parts, perfect rotor balance, a sealed long-life stator and a nearly perfect sine wave the SST series is an ideal solution for all your mobile mission requirements. **Scan QR code for complete data sheet or visit our website**

### Features Include:

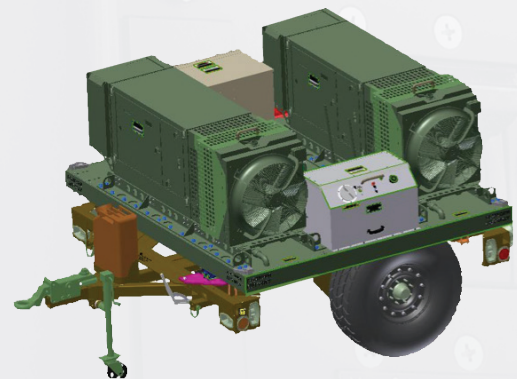
- 57 dBa at 7 meters
- EMI hardened
- Digital diagnostic control panel
- 1,275 lbs. (wet) with no sound abatement needed in the shelter
- Emergency automatic shutdown for low oil pressure, high coolant, windings and oil temperature, short circuit overload
- Manual emergency stop switch and battle short switch
- Can be mounted side by side on a trailer with auxiliary fuel tank and switchbox



Tunnel Mount Version



Trailer Mount Version



### SST 25 kW PMG Generator Three Phase 120/208VAC

The latest range of SST Generators feature engines capable of running at variable speeds while maintaining a constant frequency. They can adjust the speed to match the load with significant fuel savings, reduced wear and lower exhaust emissions. These generators can also offer full load sharing capabilities.

Our SST 25 is an extremely compact and lightweight 25kW variable speed Permanent Magnet Generator [PMG] generator. It can be paralleled with up to 4 units with cable connection and no additional equipment. The generators can be supplied in 120/280V 60 Hz, 230/400v 50 Hz. Approximately 150 units are in service worldwide. **Scan QR code for complete data sheet or visit our website**

#### Features Include:

- 70dBa at 7 meters
- 1564 lbs (wet)
- EMI hardened
- Digital diagnostic control panel
- Variable speed
- Emergency automatic shutdown for low oil pressure, high coolant, windings & oil temp., short circuit overload
- Manual emergency stop switch and battle short switch



### MEADS SYSTEM



## Unique and Diverse Design Capabilities

Fischer Panda has a complete internal design engineering staff which is highly qualified in unique and custom designs. In addition, we also have the full support of the engineering staff of Fischer Panda GmbH in Paderborn, Germany. Fischer Panda is fully export compliant and is registered with the US State Department.



## Complete Systems

These systems are designed to provide the customer a complete solution for their mission. They can be separate items or all items combined on a single framework. In this project, our customer required a generator, an ECU, fuel tank, and a power distribution/ battery box for their mobile lab. We were able to provide them a complete solution and there are over 100 of these systems in the field and in use in adverse environmental conditions for over a decade.



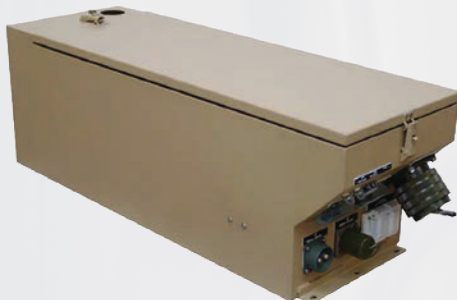
PQAS-E to the Mobile Laboratory



Generator



Power Distribution Unit



Fuel Tank



ECU



## Environmental Control Unit (ECU) 72,000 BTU Three Phase 208VAC 60Hz

The Fischer Panda 6Ton Environmental Control Unit (ECU) is quiet, compact and efficient. It uses an inverter driven variable speed scroll compressor and is Nuclear, Biological and Chemical (NBC) ready.

### Features Include:

- 72,000BTU cooling
- 40,980BTU heating
- Quiet, compact and efficient
- Variable speed scroll compressor
- NBC ready
- 810 lbs.
- **Scan QR code for complete data sheet or visit our website**



## PQAS-E Mobile Laboratory



### Under Armor Auxiliary Power Unit (APU) Systems

This class of generators compacts DC APUs using PMG (Permanent Magnet Generator) technology. They are custom designed to provide silent running of onboard equipment in armored vehicles when the main engine is disengaged. The configuration can be adapted to specific “space claims” for each unique vehicle and the controls can be integrated with existing CANbus systems upon request. **For more information on this product visit our website**

#### DC Under Armor Power Solution

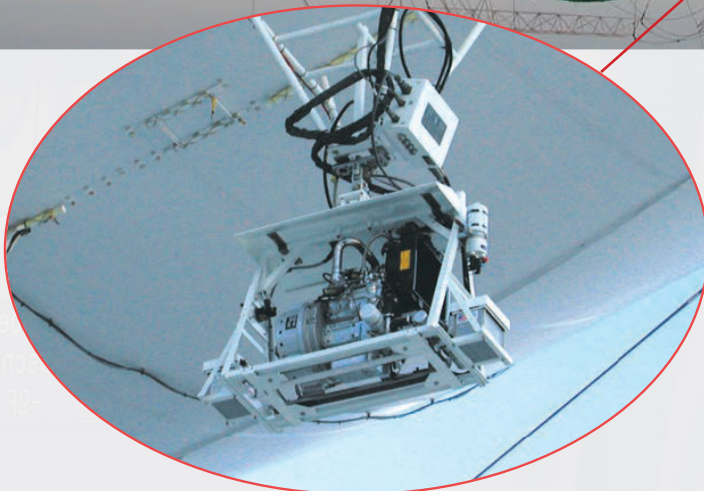


Auxiliary Power Unit (APU)



### Systems for Unique Environmental Requirements with Limited Access for Maintenance

In our constant efforts to meet our customer's unique needs, we have developed several systems that are located in remote areas and have minimal access for routine maintenance. This generator powers a radar system with 120/208v 400Hz using PMG technology without the extensive electronics usually associated with the PMG technology. (Permanent Magnet Generator) It operates at 8000 feet and has proven itself in the field over the last 15 years.



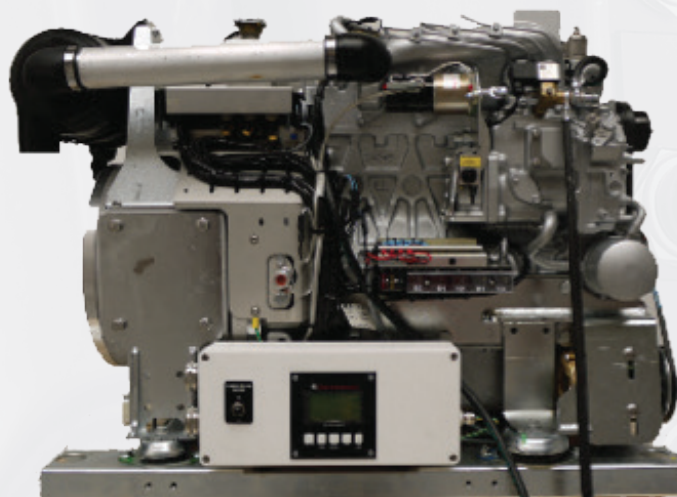
Unit designed to accommodate customer environmental needs for high altitude and minimal routine maintenance.

## High Voltage DC Generators/APU for Electric Power Systems

Fischer Panda can custom designed DC Systems to meet power and voltage requirements. These can be adapted to the mission's environment [keel cooling/radiator/heat exchanger]. CANbus integration with system control unit can be incorporated upon request.



## High Voltage DC Power Systems



## Marine Generators

Fischer Panda is the only company to build generators with a 100% watercooled asynchronous AC alternator. This feat of engineering provides distinct advantages over air-cooled generators in size weight, noise, and efficiency.

Fischer Panda AC Generators are the only true freshwater-cooled asynchronous generators built for marine applications. **Scan QR codes for complete data sheet or visit our website**

AC Mini 9 DP



AC 12 Mini DP



“CCM” or Combat Craft Medium for USSOCOM



Photo by courtesy of Vigor

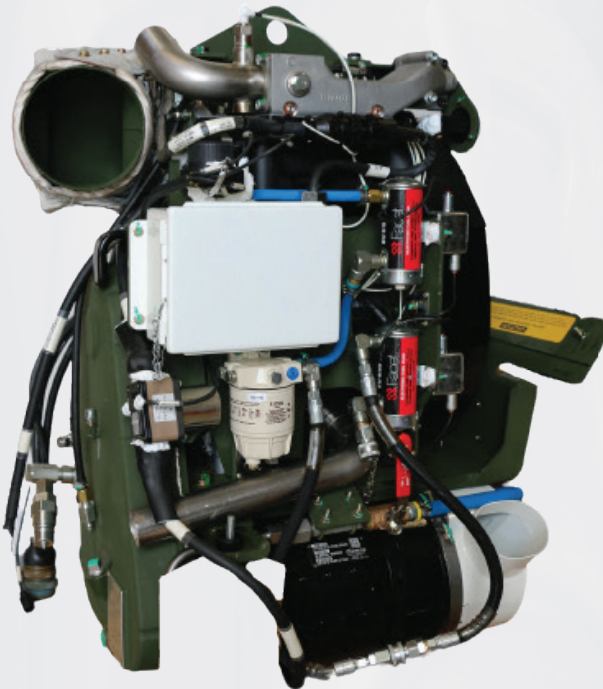


## Build to Print Capabilities

Though we have exceptional conceptual design capabilities, some of our customers require a “build to print” product. With our proficient procurement and manufacturing teams as well as our ISO certified quality system, we are able to comply with the customer’s requirements in a very timely and efficient manner. This under armor design is about 50 years old and has had many components obsoleted over this period of time. We were tasked, and successful, in having this unit up and running, tested and delivered in less than 12 months. We also support fielded units with both spare parts and technical assistance.



Under Armor APU - Built to Print



M88 Recovery Vehicle

### Commercial Grade Generators

In some applications, a commercial grade generator can be used for Disaster Relief purposes. These generators will quietly provide the power and efficiency that is needed. It is the perfect power solution for your vehicle needs. These small, quiet and efficient systems are ideal for your medical, broadcast or specialty vehicle needs.

#### 15000x PVMV-N

##### Features Include:

- 54 dBA at 7 meters
- Available with our X Control (CANbus) Management System
- Auto Stop/Start
- 697 lbs. (wet)
- Sound Cover: MPL (Stainless Steel)

Scan QR code for complete data sheet or visit our website

Other models available



## Other World-Wide Applications

### Liquid-Cooled Generators/Auxiliary Power Units (APU)

Fischer Panda has engineers, technicians and retailers in over 80 countries. With over 30,000 generators now in service worldwide, the company is acknowledged as a leader in the mobile power generator market. The company provides custom design services to meet customer specifications with top quality components and engineering tailored exactly to the need specified.

The alternators are made in-house and are recognized as some of the most compact, robust and efficient available

With a reputation for being compact, light, silent and reliable – the generators are much in demand within a wide range of commercial and military applications.

### DC Liquid-Cooled Generators:

Quiet and smooth running  
High efficiency  
Low signatures

Start and forget – silent operational running  
High reliability – long term MTBF  
Integrated compressor or hydraulic output (optional)



AGT 4000/24V PVMV-N 3.8 (kW)



AGT 5000/24V PVMV-N 3.8 (kW)



AGT 5000 PE-150NA 5 (kW)



AGT 6000/24V PVMV-N 5.5 (kW)



AGT 10000 PVM-NE 8.5 (kW)

## AC Liquid-Cooled Generators: 50Hz/60Hz

- 230 V / 50 Hz single phase
- 120 V / 240 60 Hz single phase
- 230 V / 400 V 50Hz three phase
- 120 V / 208 V 60 Hz three phase
- 240 V / 416 V Hz three phase

Fischer Panda AC generators feature all the reliability and safety of the asynchronous generator, provide fully liquid-cooled systems for both winding and engine. They produce an extremely clean sine wave for sensitive electronic equipment and are suitable for starting demanding consumers such as compressors. No cooling air is required inside of the capsule.



**PU-2060N (6kW AT 50Hz)**



**8000 PSCH (6kW AT 50Hz)**



**8000 PSC (6kW at 50Hz)**



**10000 PSC (7.5kW at 50Hz)**



**SST 10 Tunnel (10kW at 50Hz and 60Hz)**



**12.000 PSC (10.2kW at 50Hz)**



**12000 PSC (10kW at 50Hz)**



**15/10 (10kW at 50Hz)**



**15 PSC (10kW at 50Hz)**

## AC Liquid-Cooled Generators: 50Hz/60Hz



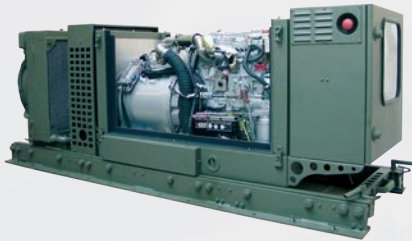
**18 PVM (10kW at 50Hz)**



**15 PSC (12kW at 50Hz)**



**18 PSC (15kW at 50Hz)**



**SST 18 (18kW at 60Hz)**



**24 PSC (20kW at 50Hz)**



**30 PVMV-N (20kW at 50Hz)**



**24 PSC (20.5kW at 50Hz)**



**30 PVMV-N (20.5 kW)**



**30 PSC (22kW at 50Hz)**



**SST 25kW (25kW at 60Hz)**



**40 - 2 PSC (30kW at 50Hz)**



**40 Lom PSC (33kW at 50Hz)**

## AC Liquid-Cooled Generators: 400Hz

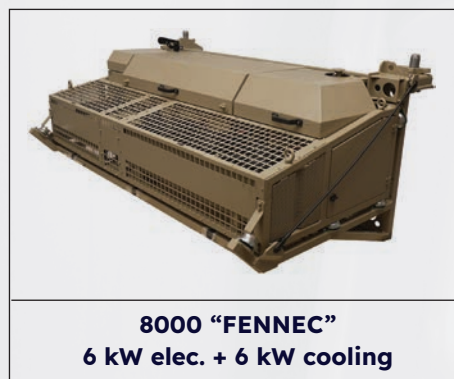
120V / 208V / 400Hz

240V / 416V / 400Hz



## Combined Generator (Combo) and Environmental Control Unit (ECU) Systems

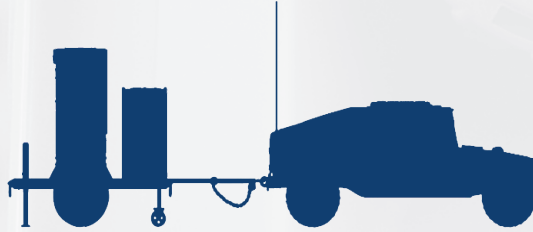
- Power, heating and cooling for shelter systems
- Complete generator / ECU for tent shelter systems
- Complete generator / ECU for container based systems



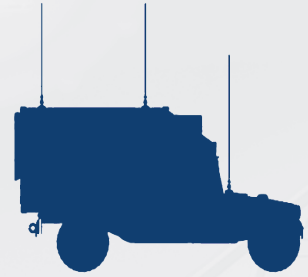




Communications



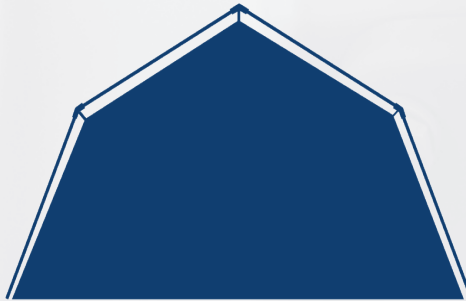
Mobile workshops  
chassis mounted units



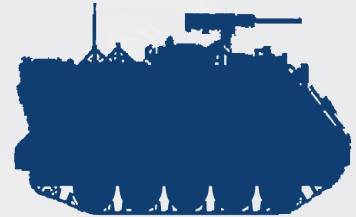
Command and control systems



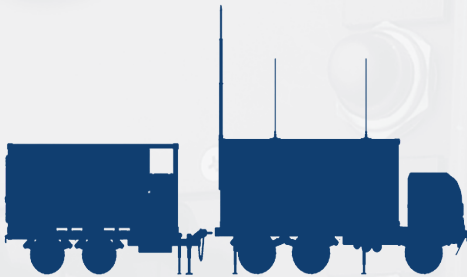
Tracked command posts



Mobile Tactical Shelters



Recon / AFVs



Trailer mounted APUs



DROPS / PLS  
based applications



Tactical shelters  
command headquarters



**FischerPanda®**  
MOBILE POWER SYSTEMS

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**Disclaimer:**

The information contained here is to the best of our knowledge accurate at the date of publication. Please note that the data in this publication reflects the technical state at time of print. Dimensions do not include latches, fittings etc. Additional room will need to be calculated for installation to include hoses, cables and capsule mountings. Additional components or alternators may also affect capsule dimensions. Due to our policy of continual product development, we reserve the right to alter technical specifications without notice.

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