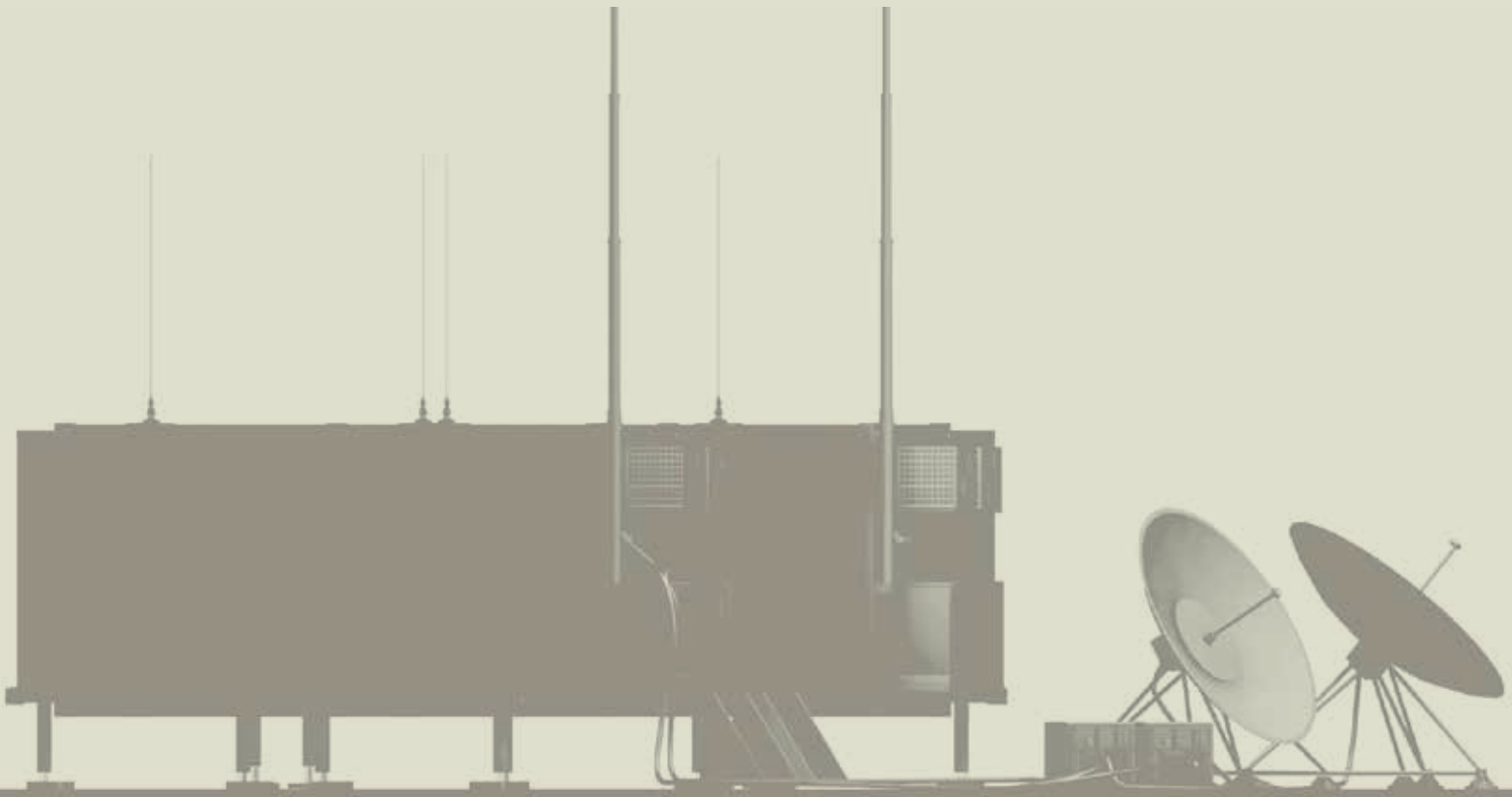




## Defence Energy Systems



**Fischer Panda**



# Energy and air-conditioning systems

**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.

## 1. POWERING YOUR DEFENCES

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

The demand for power	4
The requirement	5
Meeting the requirement	5

## 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.

Company profile	6
Designed and built for extreme conditions	8
Modular design for installation flexibility	10



### 3. POWER - WHEREVER YOU ARE

Fischer Panda generators are suited for a wide range of military applications requiring compact, quiet, efficient and quickly-deployable power solutions.

Power systems for integrated vehicle operations	12
Power systems for light forces C3 applications	14
400 Hz power systems for air defence applications	16
Integrated AC power systems for medium-sized vehicle applications	17
Parallel power - scalable power systems	19
Power for general purpose applications	20

### 4. OPERATIONAL WORLDWIDE

Selected Fischer Panda DC and AC generators with military specifications currently in use.

Air-cooled DC generators	20
Water-cooled DC generators	21
Water-cooled AC generators 50 / 60 Hz	22
Water-cooled AC generators 400 Hz	23
Combined generator / aircons (combi) and ECU Systems	23



# Powering your defences

## 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 peacekeeping 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 utilise them to 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 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 minus 45 degrees Celsius and work reliably and with high efficiency up to at least 55 degrees Celsius 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 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 water-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 decentralised power assets to manage peak demands for power during operations by combining the power output or swapping the load to sustain supply. Power - wherever you are.



*„The exhaust system is awesome. Very low IR and easy to adapt to any special requirement.“*

## Fischer Panda generators

### Company profile

Fischer Panda GmbH, established in 1977, has been producing top class generators for almost 50 years. With tens of thousands of generators now in service, the company is acknowledged as a leader in the mobile power generator market. Fischer Panda aim for perfection – top class design, top quality components, top grade engineering and perfect performance tailored exactly to the need specified. The alternators are all made in-house and are recognized as some of the most compact, robust and efficient available.

Originally named Icemaster GmbH, the company began by producing mobile refrigeration systems. From this technology base the company began to develop the world's first 100% water-cooled marine generator in co-operation with the BMW marine division. Coupled with a patented voltage control system (VCS) - this led to the Fischer Panda Generator.

With a reputation for being comparably compact, light, silent and reliable - the generators are much in demand within a wide range of marine and vehicle application, in fact wherever high quality mobile power is required. Many Formula One teams and renowned boat builders are long time customers of Fischer Panda.

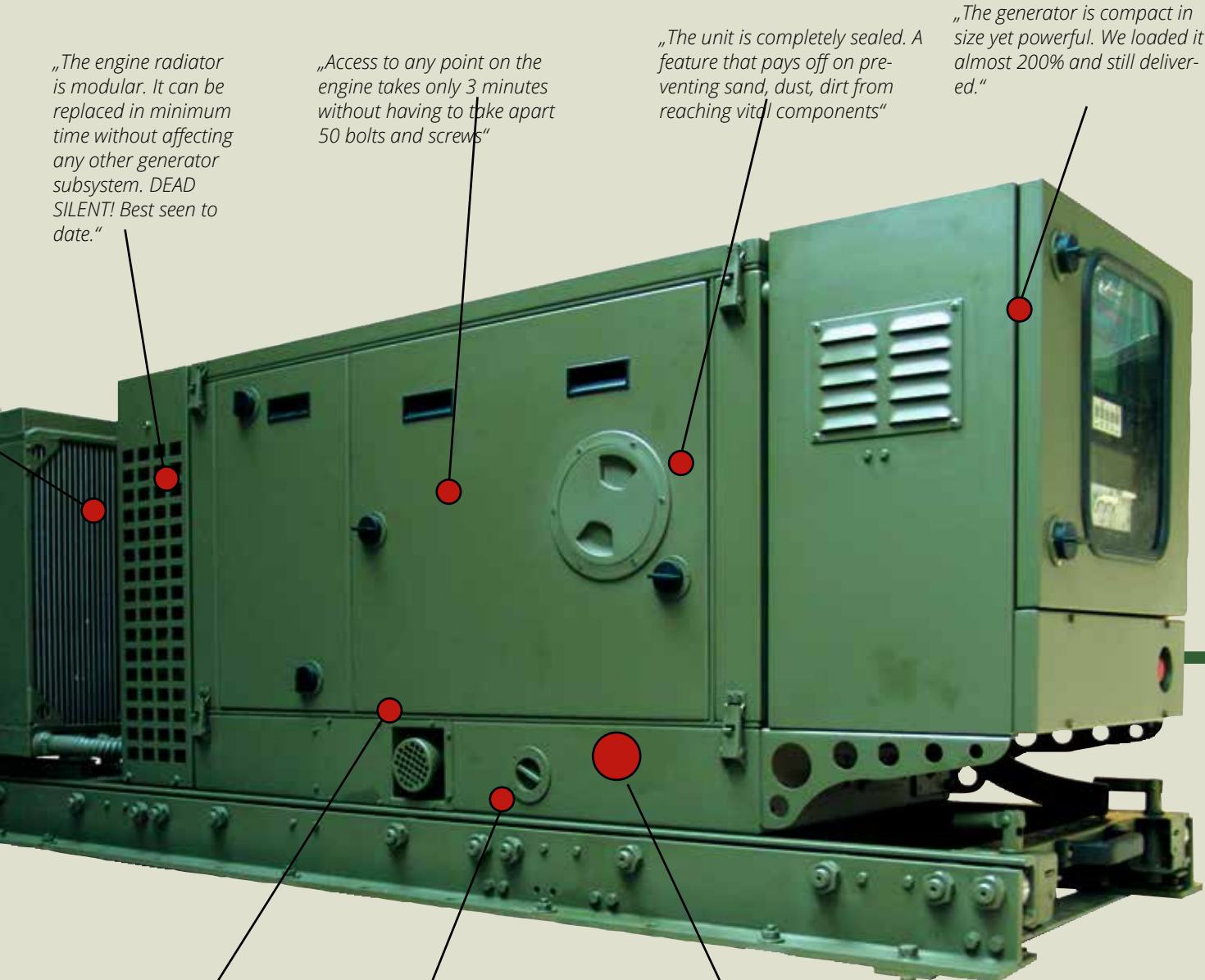
The first generators for military use were available in the mid 1990s as part of a modular “commercial off the shelf” (COTS) range for shelter and trailer applications. After Fischer

Panda perfected tunnel technology in 1999, generators designed specifically for the military appeared in the range. An example is the DC PE150 series, perfect for automatically maintaining battery systems onboard AFVs. A further development was the Combo system, featuring an AC generator and high efficiency ECU for installation in a dedicated shelter tunnel. Latest models feature variable speed constant frequency technology in a compact, quiet and lightweight design.

This permanent magnet system has been comprehensively tested to a wide range of MIL Standards in the USA. All larger generators are capable of being connected together to form parallel systems with options for load switching and load sharing.

With almost 50 years of experience and leading quality in reliable power supply, Fischer Panda delivers premium products and customer service thanks to future-proof and efficient technologies. Supported by its worldwide service network, the company offers the best customer service with qualified installations and commissioning.

## 1. Powering your defences



„The engine radiator is modular. It can be replaced in minimum time without affecting any other generator subsystem. DEAD SILENT! Best seen to date.“

„Access to any point on the engine takes only 3 minutes without having to take apart 50 bolts and screws“

„The unit is completely sealed. A feature that pays off on preventing sand, dust, dirt from reaching vital components“

„The generator is compact in size yet powerful. We loaded it almost 200% and still delivered.“

„The arrangement to be able to access 96% of maintenance points on one side makes it a dream to service.“

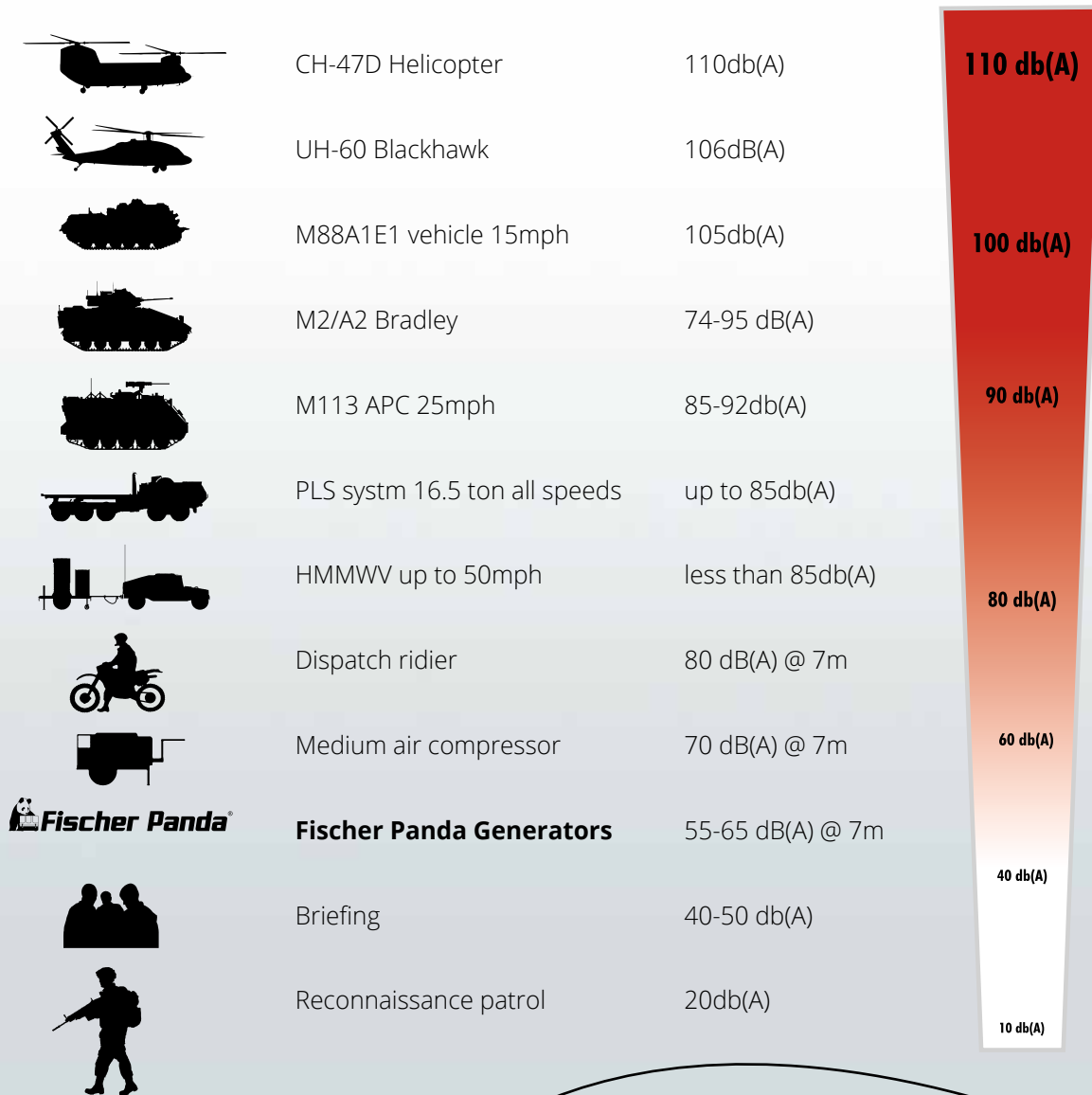
„Vibrations are almost unperceptive.“

„After seeing this unit perform, I can say is the best generator design I have seen in 15 years“

Designed and built for extreme conditions

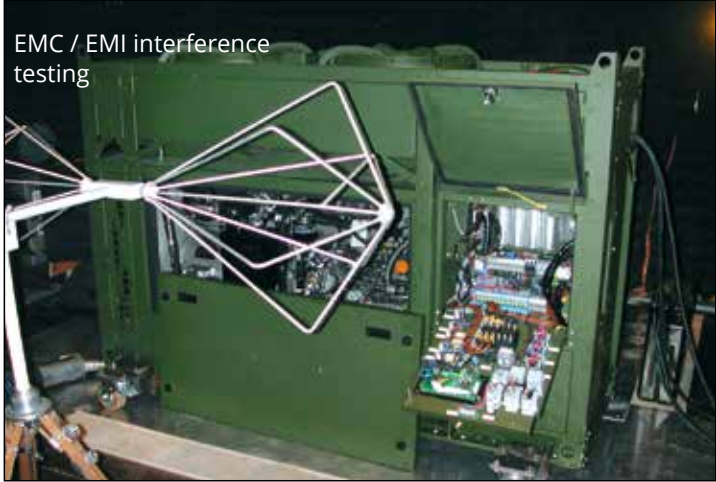
Fischer Panda has a full military specification for its generators and is experienced with designing and constructing generators to a wide range of MIL-STD requirements especially concerning EMI levels and IR signatures, exhaust emissions and operating sound levels. Custom-built generators can be constructed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

The use of water 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.





Operating in sub-zero temperatures



EMC / EMI interference testing

- 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
- Meet all emission regulations
- Low thermal Signature
- Meet EMC/EMI milspecs or defstans:

**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

- 3000 metres 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



*This Fischer Panda Generator endures 7-days non-stop operation while suspended below a surveillance balloon at an altitude of 5000 meters.*

# Modular design for installation flexibility

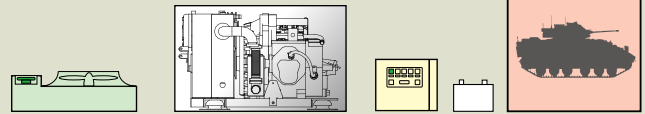
Fischer Panda Generators are compactly constructed and highly suited for applications which have limited installation space available. Generators are available for internal installation within the vehicle and external mounting on the chassis. The modular nature of the Panda generators makes them particularly 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 for internal installation



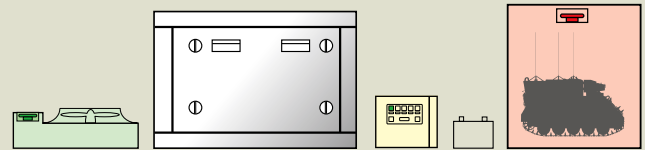
Suitable for internal mounting in very tight spaces such as engine bay, fender or compartment. The generator is generally connected to vehicle fuel system. Requires an external radiator for cooling.

- 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. Water 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

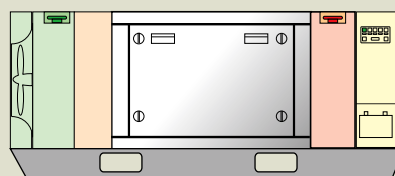


## Fully self-contained generators

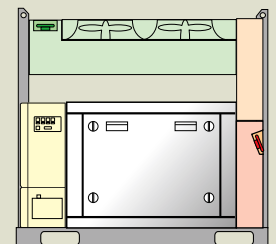


These fully self-contained generators are fitted with an integrated cooling system, fuel tank and electrical control cabinet.

- Suitable for external mounting
- Lifting eyes / forklift transport
- Completely mounted on frame
- Fast, easy access to components for maintenance
- Sound insulation capsule
- No additional exhaust silencer required
- Integrated radiator and cooling system
- Integrated fuel system
- Electrical cabinet and power distribution



All major components are fitted with a vertically mounted radiator.



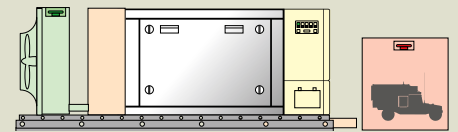
All major components are fitted with a horizontally mounted radiator.

## “Supersilent Tunnel” generators

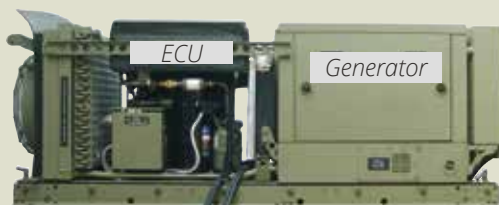


SST “Super Silent Tunnel” Generators for mounting in enclosed area such as Humvee tunnel. Generators can be connected to vehicle fuel tank and start batteries for lowest all-up weight.

- Supersilent Tunnel Generators
- Suitable for shelter tunnels
- Mounted on telescopic slides

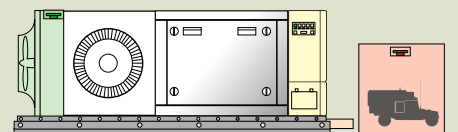


## Power and air conditioning for vehicle systems



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



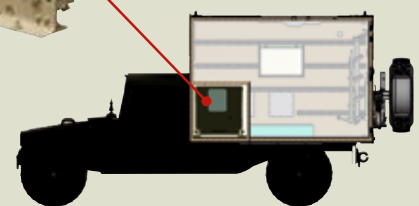
## Fischer Panda “SST Combo”

Fischer Panda SST generators are designed for mobile shelters with a dedicated generator “tunnel”. Versions feature an integrated ECU with of sufficient capacity to supply controlled environment and power within the shelter.

- Combined ECU and power system
- Optimal cooling and heating
- Compact design
- Designed for mobile with generator tunnel
- Mounted on rails for easy access
- Can connect to vehicle fuel supply



Fischer Panda Generator with integrated ECU



## Fischer Panda 8000 “FENNEC”

Fischer Panda FENNEC is an externally mounted generator for shelters with a split-system ECU. The evaporator is mounted within the shelter. The generator supplies also supplies electrical power to the shelter.

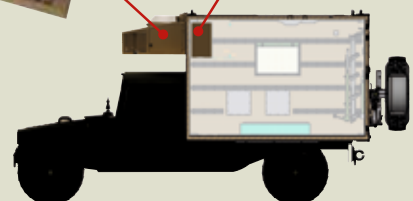
- Combined ECU and power system
- 6 kW electric / 6 kW cooling
- Redundant operation
- Intelligent energy management
- Innovative compressor technology
- Integrated safety features



wall-mounted evaporator



Fischer Panda 8000 “FENNEC”



## Power systems for integrated vehicle operations

Armoured 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 armoured wheeled vehicles have proven to be very vulnerable. They form the first major communications link for troops in contact operations.

Panda AGT (Advanced Generator Technology) power units (APU) are driven by water-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 most economical use of fuel while maintaining full combat capability.

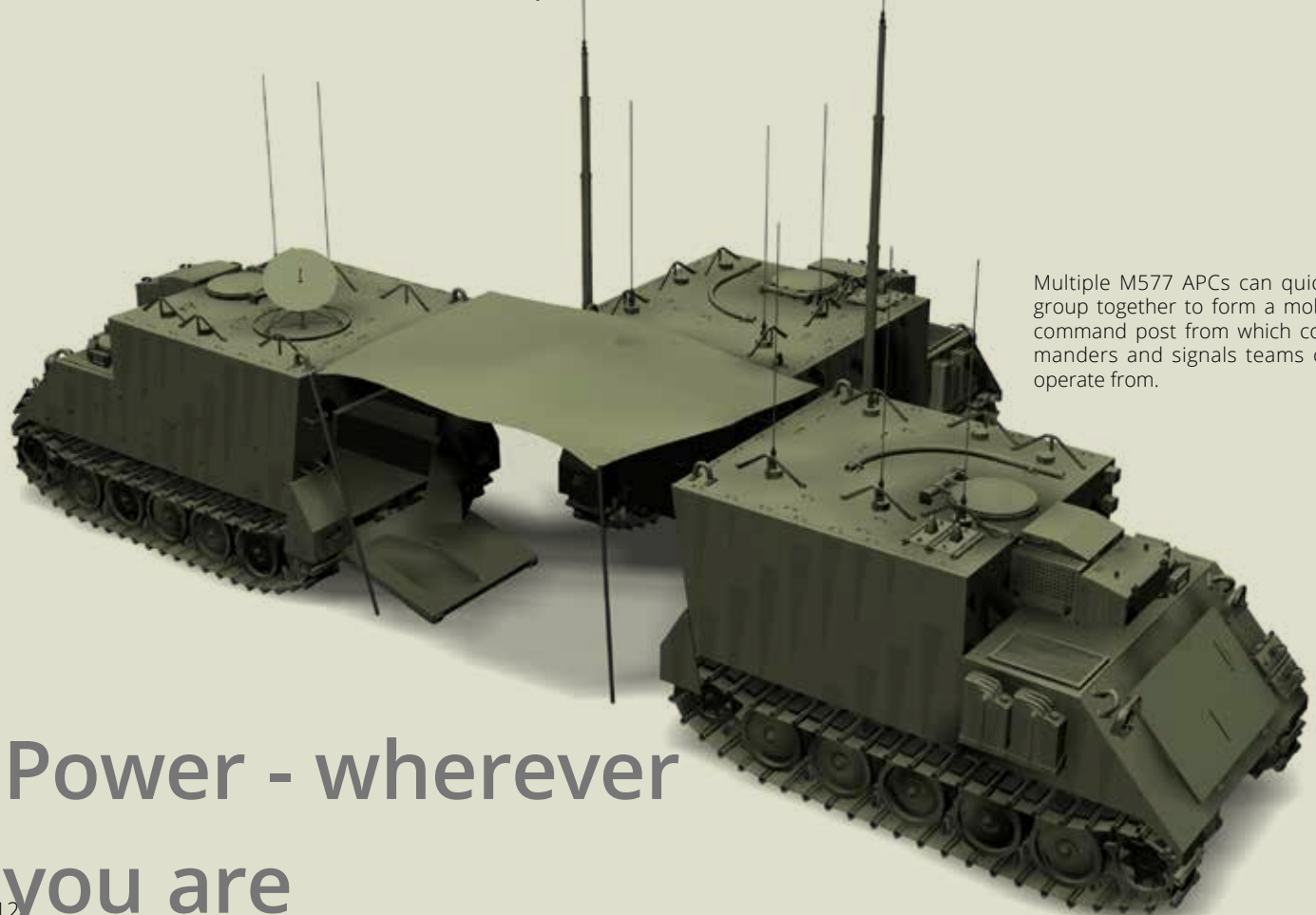
If there is absolutely no room for a sound insulation capsule, the generator may be installed in very tight equipment compartment inside the hull. The modular design makes it possible to distribute the generator's major components throughout the vehicle wherever space is available.

Generators for installation outside the vehicle are housed in 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 water 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 water-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 m which makes the generator completely inaudible beyond 20 metres. The generator charges the vehicle batteries automatically with very high efficiency and consumes approx. 1.5 litres/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.



Multiple M577 APCs can quickly group together to form a mobile command post from which commanders and signals teams can operate from.

Power - wherever  
you are



Image courtesy of The Norwegian Armed Forces

Scandinavian Armor  
www.haaland.info



Flagship generator - The PE-150 N series is developed specially for M113 APC and M577 Command Post Variant.



Especially low design with integrated 8.000 BTU compressor for mounting inside T-72 hull



Ready for deployment. State of the art 10kW generator with hydraulic PTO designed specifically for installation within modern AFVs



Generator with integrated silencer for installation in M2/A2 Bradley AFV fender

## Power systems for light forces C3 applications

The mobility and size of wheeled vehicles enables commanders to deploy rapidly by air, co-ordinate operations and assets while operating in non-armoured formations. C3 networks can be deployed providing line-of-sight radio relays to connect forward units with higher-level networks over wide areas. To operate successfully, such systems rely increasingly on sophisticated and powerful electronics. Reliable power is of prime importance.

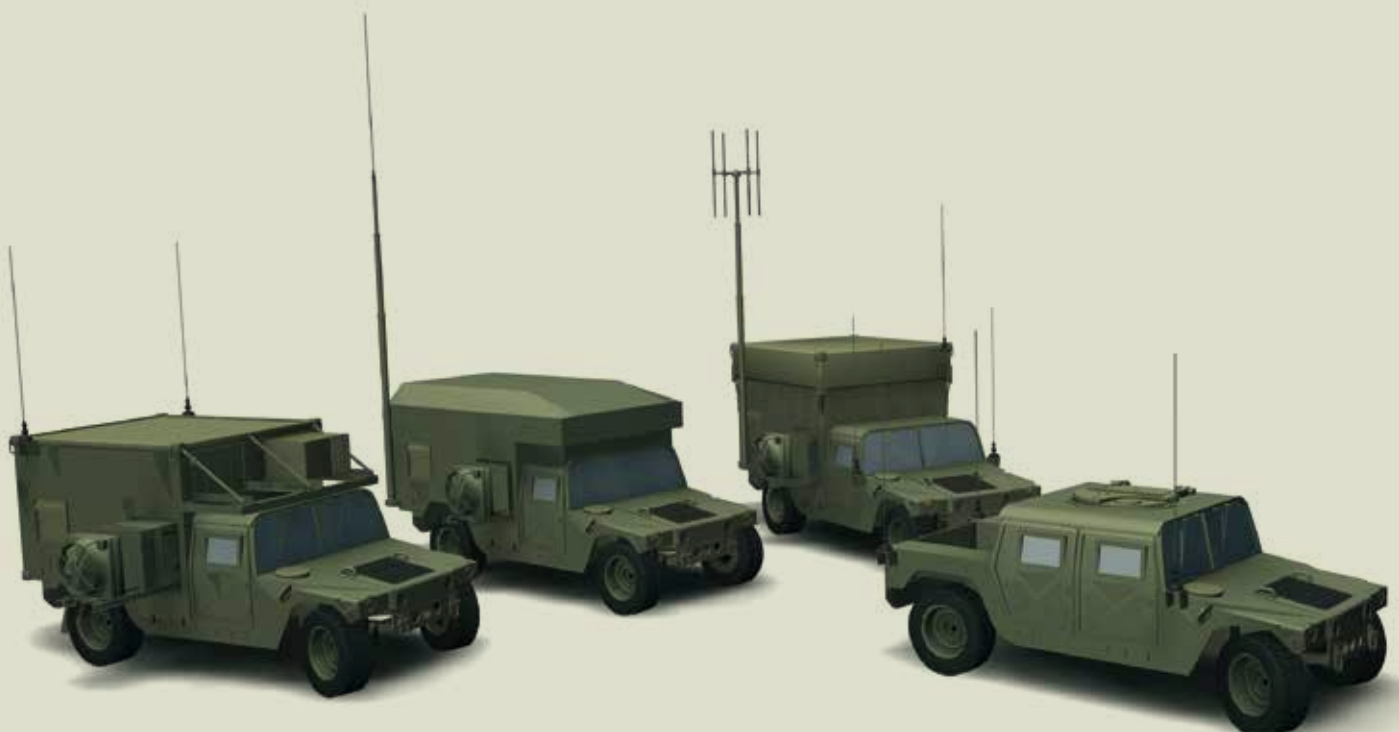
Vehicles such as the M1097A2 Shelter Carrier variant of the HMMWV (Humvee) are used in light operations and in roles where tracked vehicles are considered unacceptable - such as supporting humanitarian or disaster relief operations. With sufficient room for equipment and operators - the vehicle has become the standard for deploying mobile C3 systems. The shelter has a dedicated generator "tunnel" which allows a generator of sufficient capacity to be installed in a protected area as primary power source. This is a major advantage as it removes the need for cumbersome trailers, thus improving off-road capabilities and reducing the setup and into action times. Getting rid of trailers also reduces the airlift requirements which saves both money and time in deployment.

Sensitive electronic equipment also requires a controlled environment in which to operate, improve productivity, decrease downtime and increase the equipment's operational

life-span. Fischer Panda Super-Silent Tunnel generators are developed to supply power and conditioned air to such shelter-based systems. The lightweight, compact and modular design of these „combination“ generators has proved successful in supplying a diverse range of solutions specifically for HMMWV mounted systems, and which can be extended to most light and medium wheeled systems.

The complete system is mounted on telescopic slides to allow access to the complete generator, electrical, exhaust and cooling system after it has been installed. Connectors on the generator enable the generator to be supplied from the vehicle's fuel tank. The generator can be controlled from inside the shelter via a panel.

Some shelters have retractable roofs which can be lowered so they can be deployed in smaller transport aircraft. This prevents an ECU from being mounted externally. For such units, Fischer Panda "Combo Units" provide the perfect solution. Both generator and a 22.000 BTU ECU are combined into a single unit to supply both electrical power and a controlled operating environment.





Mobile command and communication systems require efficient AC power and ECUs for cooling sensitive electrical equipment while operating under harsh conditions.



Super-Silent Tunnel Versions. A Panda 18 kW generator mounted on slides designed specifically for supplying power to shelter-based applications.



To keep the weight to an absolute minimum, the compact SST generator connects directly to vehicle's main fuel tank.



Panda 10 Combo for 10 kW electrical or 5kW + 4kW cooling (18,000 BTU) ECU into a single light-weight, transportable package that is quiet, efficient and built for harsh environments.



Panda 12 Combo for 12kW electrical power or 12 kW electrical or 7kW + 5kW cooling (24,000 BTU) ECU. Suited for larger power applications using M997 HMMWV ambulance shelter variants.

## 400 Hz Power systems for air defence applications

Water-cooled AC generators 400 Hz

120V / 208V / 400 Hz

240V / 416V / 400 Hz

120V / 208V / 400 Hz

Power for vehicle mounted applications

Radar / weapon control centres, air defence systems and satellite communication systems require a dedicated supply of continuous, clean power so that their sensitive electronics can operation without disruption. Fischer Panda manufactures generators for these types of special systems which operate with 400 Hz.



Self contained 400 Hz version with 6 kW generator mounted with forklift pockets.



Compact 8 kW generator connects directly to vehicle's main fuel tank.

## Integrated AC Power Systems for Medium-sized Vehicle Applications

Power for PLS / DROPS deployable systems

The Palletized Load System (PLS) / Dismountable Rack Offload and Pickup System (DROPS) has revolutionised the distribution and resupply system. Complete systems including generators with electrical distribution can be quickly transported to support critical front-line missions where they are required.

Fischer Panda Generators are enclosed in a super-silent capsule which ensures the operation sound level is kept to a minimum. The rugged design also protects generators from harsh weather conditions or other environments.

Power for tactical shelter systems

Tactical shelters are designed to be deployed and setup quickly while operating in a lighter tactical role. They are constructed as soft-skinned, hybrid, or rigid shelters with expanding sides or tent attachments to form larger self-contained operational areas. When deployed as tactical command headquarters they provide commanders with electrical power and a protected environment for equipment to operate in.

Fischer Panda Generators are designed to fit into limited installation areas. Fully self-contained generators are capable of providing continuous energy supply during deployment and handle peak power requirements during intensive operations.



# 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 shutdown 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 with two generators - load switching

Two Panda AC generators can be synchronised to switch load from one generator to another of the same model.

Panel



Panda Standard Asynchronous AC Generator

Panel



Panda Standard Asynchronous AC Generator



Fischer Panda Parallel Transfer Cabinet

230V AC

## Parallel operation with an external source - load switching

A Panda AC generator fitted with fpControl system can to autostart and switch load to generator on lose of external land power connection.



Panda Asynchronous AC Generator with fpControl



External power supply Land / Grid Power



230V AC

## 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 centres, 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 metre from the generator and low signatures reduce the possibility of detection.

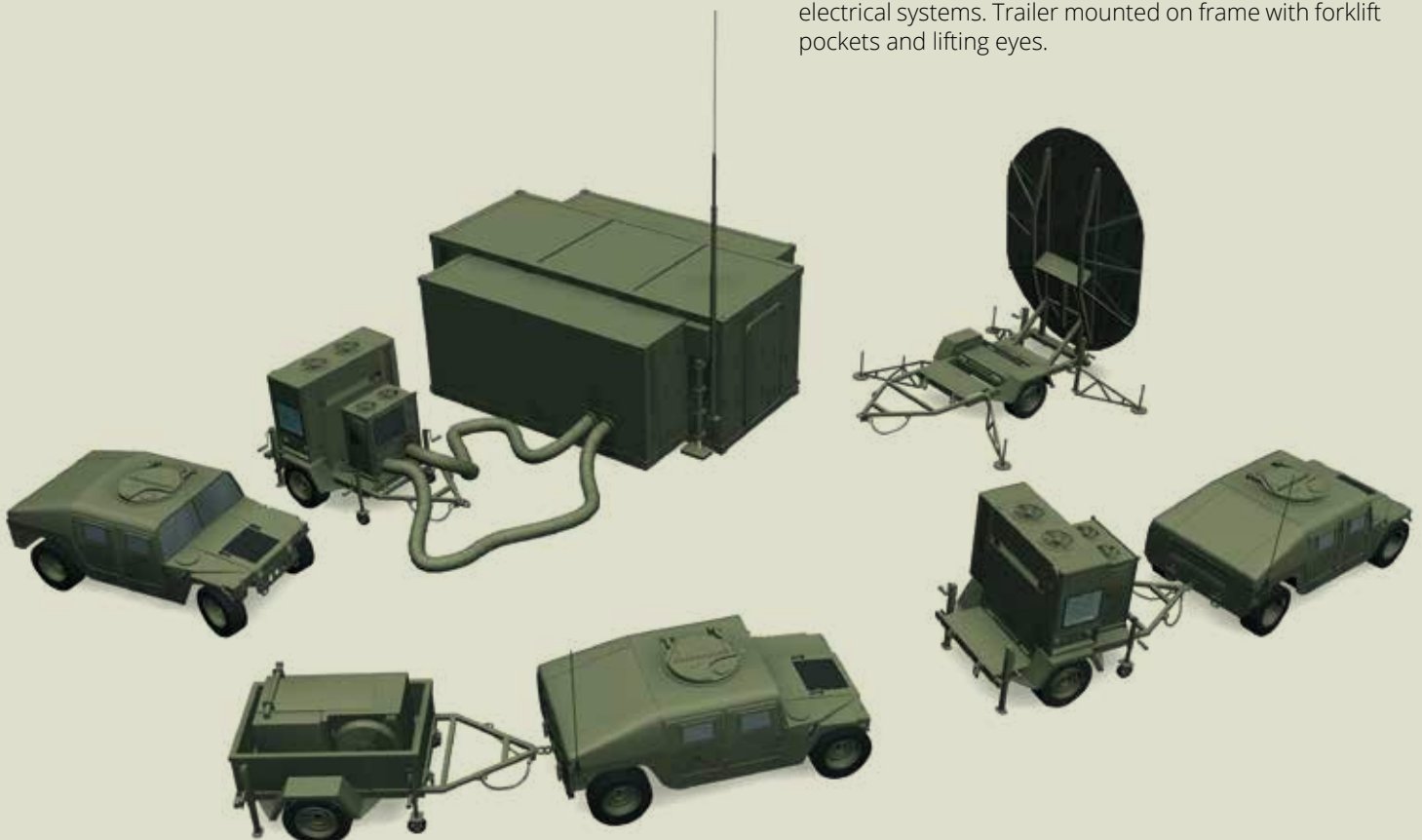
Extreme weather conditions such as heat and terrain can take a high toll on material. The water-cooled Fischer Panda Generator does not require hot and dusty air to keep cool while operating. This means a long and trouble free life for the equipment.



Complete unit, cooling, fuel, 6 kW 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, 6 kW generator and electrical systems. Trailer mounted on frame with forklift pockets and lifting eyes.





Folding radiator assembly allows access to generator unit. The ends of the frame base serve as pockets for transporting by fork-lift.



Fully self-contained 6 kW generator with horizontally mounted radiator (tall-version). The unit is mounted on slides which allow 100% extension.



Fully self-contained mounted on frame. The frame base can be transported by fork-lift. The major electrical connections are grouped on the side of the cabinet.



Complete unit, cooling, fuel for 72 hours, 15 kW generator and electrical cabinet mounted on frame. Major electrical functions via remote control unit.



Fully self-contained generator with fuel tank, electrical cabinet. This generator is being used to power a SATCOM unit.



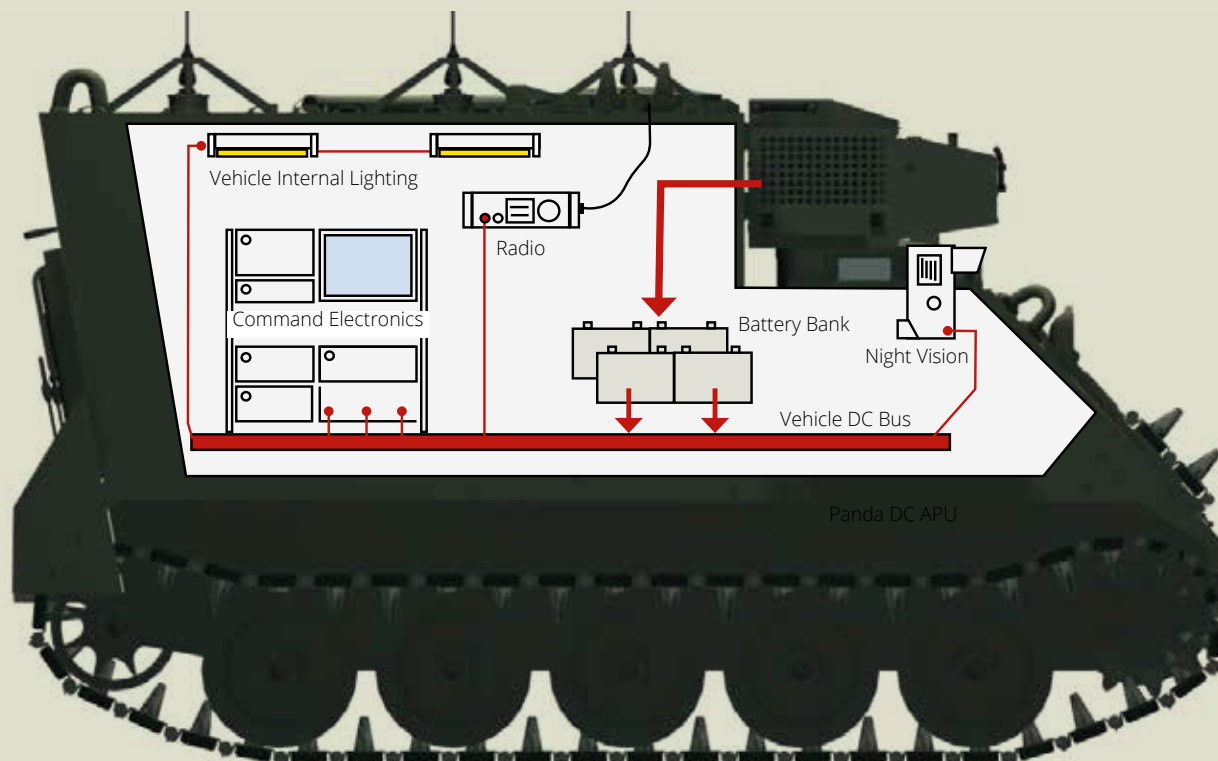
Teamwork:Trailer Mounted 40kW Generator with Fischer Panda's own ECU 6000 providing 75.000 BTU specifically designed for military applications.

# Operational worldwide

Fischer Panda Generators are currently in use by major armed forces worldwide: Austria, Canada, Denmark, France, Germany, Italy, Netherlands, Norway, Poland, Singapore, Slovakia, South Africa, Spain, UAE, United Kingdom, United States of America and Turkey.

## DC Generators

Fischer Panda DC generators operate as part of an intelligent DC-AC power system. Most general purpose power systems rarely require the full amount of power that the system is capable of supplying continually. A battery bank of sufficient capacity is used to supply the energy which drastically reduces fuel consumption and running times. The generator is capable of providing fast and efficient battery charging and is only required to run (starts and stops automatically) when the batteries require recharging. Low noise, energy saving are good reasons for making use of this type of power system. An inverter can be added to the system to supply 230 V AC. The DC generators are available in a wide range of standard voltages 12 V / 24 V / 48 V to suit typical mobile power systems. Other voltages are available on request.



*The Panda DC generator extends the operational capabilities of a battery-based systems.*

### Air-cooled DC generators

28 V / 2 kW – 4.5 kW  
 Quieter than most air-cooled units – c.70 dbA  
 Ideal for lighter installations – 80 to 110 Kg

Electric and manual start  
 Easy to service and maintain  
 Good EMC / EMI performance



Panda AGT 2500L-YA D MC

2.1 kW



Panda AGT 3500L

3.2 kW

### Water-cooled DC generators

28V / 4 kW – 10 kW  
 Quiet and smooth running  
 High efficiency  
 Low signatures

Start and forget – silent operational running  
 High reliability - long term MTBF >10,000 hours  
 Integrated compressor or hydraulic output (optional)



Panda AGT 4000/24V PVMV-N

3.8 kW



Panda AGT 5000 PE-150NA

5 kW



Panda AGT 5000 PE-150N

5 kW



Panda AGT 6000/24V PVMV-N

5.5 kW



Panda AGT 10000 PVM-NE

8.5 kW

## AC Generators

### Water-cooled AC generators 50 / 60 Hz

4 kW - 65 kW  
 230 V / 50 Hz single phase  
 120 / 240 V 60 Hz single phase  
 230 V / 400 V 50 Hz three phase  
 120 V / 208 V 60 Hz three phase  
 240 V / 416 V 60 Hz three phase

Fischer Panda AC generators feature all the reliability and safety of the asynchronous generator, provide fully water-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.



Panda PU-2060N

6 kW / 7 kVA



Panda 8000 PSC

6 kW



Panda 8000 PSCH

6 kW / 7 kVA



Panda 8000 PSC

6 kW / 7 kVA



Panda 10000 PSC

7.5 kW / 8,8 kVA



Panda SST 10 Tunnel

10 kW / 11.7 kVA

## 4. Operational worldwide



Panda 12,000 PSC

10.2 kW / 12 kVA



Panda 12000 PSC

10 kW / 12 kVA



Panda 15/10

10 kW



Panda 15 PSC

10 kW



Panda 18 PVM

10 kW / 11.7 kVA



Panda 15 PSC

12 kW / 14 kVA



Panda 18 PSC

15 kW / 17.6 kVA



Panda SST 18

18 kW / 21 kVA



Panda 18 PSC

15 kW / 17.6 kVA



Panda 24 PSC

20 kW / 23.5 kVA



Panda 24 PSC

20.5 kW



Panda 30 PSC

22 kW / 25.8 kVA



Panda 30 PVMV-N

20 kW / 23.5 kVA



Panda 30 PVMV-N

25.5 kW



Panda 30 PSC

30 kW (with autostart function on loss of land power)

Water-cooled AC generators 400 Hz

120 V / 208 V / 400 Hz  
 240 V / 416 V / 400 Hz  
 120 V / 208 V / 400 Hz



Panda AGT 12000 PSC  
 12 kW / 14 kVA



Panda AGT 10000 PVMV-N  
 10 kW / 11.7 kVA



Panda AGT 6000 PSC  
 6 kW / 7 kVA

Combined generator / aircons (combi) and ECU Systems

10 kW electric + 22.000 BTU aircon  
 28 V DC + aircon  
 Power, heating and cooling for HUMVEE mounted shelter systems  
 Complete generator / ECU for tent shelter systems  
 Complete generator / ECU for container based systems



Pandva 8000 "FENNEC"  
 6 kW elec. + 6 kW cooling



Panda 10 SST Combo  
 10 kW elec. OR 5 kW elec. + 4 kW cooling



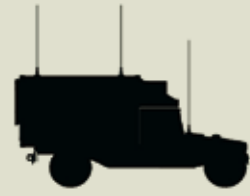
Panda 30 CAPS Combined Systems  
 up to 20 kW elec. / 2 x 8 kW cooling



Communications



Mobile workshops / chassis mounted units



Command and control systems



Tracked command posts



Mobile Tactical Shelters



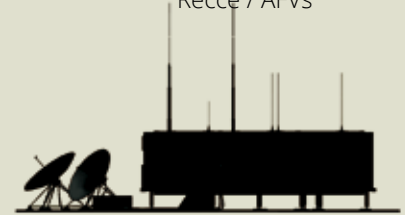
Recce / AFVs



Trailer mounted APUs



DROPS / PLS based applications



Tactical shelters / command headquarters

Exclusive UK Distributor:



**FischerPanda**  
UK | POWER  
SOLUTIONS

## Fischer Panda UK | Power Solutions

17 Blackmoor Road, Ebblake Industrial Estate, BH31 6AX, Verwood  
+44 1202 820 840 | [info@fischerpanda.co.uk](mailto:info@fischerpanda.co.uk) | [www.fischerpanda.co.uk](http://www.fischerpanda.co.uk)



# FischerPanda

Fischer Panda GmbH  
Otto-Hahn-Str. 40  
33104 Paderborn  
Germany

Tel. : +49 5254 9202-0  
Email : [defence@fischerpanda.de](mailto:defence@fischerpanda.de)  
Web : <https://defence.fischerpanda.de>

### 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.

Stand: 11-2025