

POWER IN PRACTICE

Powering a Mobile Command Centre for Field Testing and High-Bandwidth Communications

A mobile command centre and laboratory was developed for field surveillance applications in Malta, creating a fully self-contained platform for high-bandwidth communications, research, and live operational deployment.

The University of Malta tasked Exceleerate Technology with delivering the bespoke mobile solution, with Torton Bodies providing specialist vehicle conversion expertise to support the build and system integration. Built on a 7-tonne IVECO Daily chassis, the vehicle is designed to operate in demanding environments where reliable connectivity, data processing, and field performance are critical.

A Fischer Panda onboard generator was selected as the preferred power solution, offering compact design, quiet operation, and high efficiency for noise-sensitive mobile applications.

APPLICATION & CHALLENGE

Designed as a fully self-contained mobile laboratory and command platform, the vehicle enables advanced communications, real-time data processing, and field-based operational capability from a single integrated system.

It supports high-bandwidth multi-network connectivity, live video streaming, drone deployment, and mobile research applications, creating a highly flexible environment for both field operations and live event use.

To achieve this, the platform had to operate independently for 8-10 hours while remaining within a strict 7.5-tonne vehicle weight limit. The onboard systems also placed a continuous high electrical demand on the platform, driven by computing hardware, communications equipment, and auxiliary technologies, all within a compact and mobile footprint where space, weight, and accessibility were tightly constrained.



INTEGRATED PLATFORM CAPABILITIES

The completed vehicle incorporates a sophisticated suite of onboard technologies, including:

- Dual high-performance workstations for intensive processing tasks
- Real-time data processing and multi-display video streaming
- Multi-network connectivity with intelligent load balancing
- Integrated AV and system monitoring interfaces
- Mast-mounted camera systems and onboard drone storage

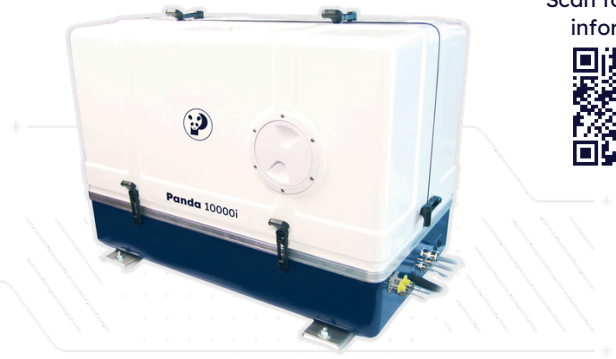
Together, these systems create a highly capable mobile environment for communications, research, and operational deployment.



THE SOLUTION

A fully integrated approach was delivered through close collaboration between Excelerate Technology, Torton Bodies, and Fischer Panda UK | Power Solutions, combining specialist vehicle engineering, system integration, and reliable onboard power generation.

Fischer Panda UK supplied the generator ensuring stable and efficient performance throughout extended operations in demanding environments.



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POWERING THE VEHICLE

- Compact footprint for easy integration
- Lightweight design to support vehicle weight limits
- Ultra-quiet operation, ideal for surveillance and urban environments
- Stage V emissions compliance, meeting the latest environmental standards

The unit delivers reliable, continuous power while maintaining low noise levels and reduced environmental impact, making it particularly well suited to specialist vehicle applications where performance and discretion are essential.

PANDA 10000i PVMV-N

Generator Type	iSeries - Perfect Power
Generator Version	PVMV-N
Capsule Type	GFK
Voltage Regulation	iControl
Voltage Tolerance	±3%
Cos Phi	0.80
Frequency [Hz]	50
Sound Levels [dBA] 7m / 3m / 1m	52 / 62 / 67
Weight with capsule (kg)	195
Dimensions Housing	760 x 515 x 609

WHY FISCHER PANDA UK | POWER SOLUTIONS?

“With Fischer Panda UK, we know we can rely on their extensive knowledge and experience to support our enquiries and have built up a great relationship over the years. This project was no different, with their systems arriving on time and ready to be installed by our in-house team. Their solution is compact, reliable and well-priced, making it the natural choice.”

James Andrews, Managing Director, Torton Bodies



PROJECT PARTNERS

TORTON BODIES

A specialist vehicle bodybuilder, Torton Bodies designs and manufactures bespoke box bodies and mobile platforms for commercial and specialist applications. Its focus on robust engineering and practical design ensures each vehicle provides a reliable foundation for complex onboard systems.

EXCELERATE TECHNOLOGY

Excelerate Technology delivers fully integrated, mission-ready vehicle platforms for demanding operational environments. Combining engineering expertise with advanced system integration, the company develops high-performance solutions supporting communications, monitoring, and field operations.

WE BRING THE POWER

Fischer Panda UK | Power Solutions provides complete system solutions for the marine, vehicle and defence sectors. Fischer Panda generators and propulsion | Mastervolt power electronics | CZone digital switching | Clayton Power all-in-one-power system | EFOY fuel cell system | Integrel Solutions engine power | Parker and Wananchi watermakers | Autoclima, Eberspächer and Dometic climate control

