

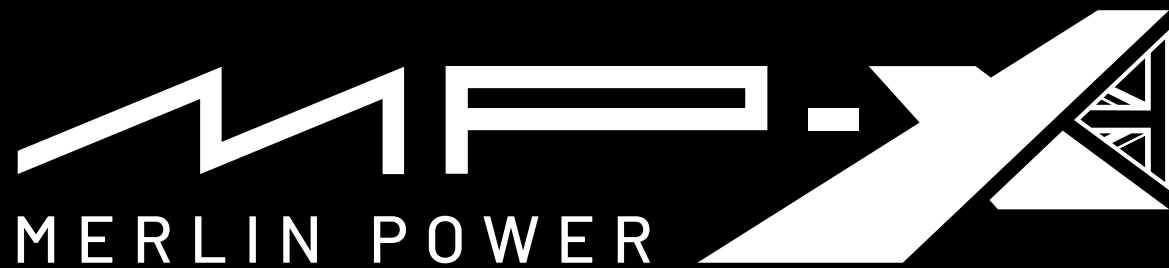


11.2kW
OUTPUT POWER

9h
SILENT @ 3kW

<10min
DEPLOYMENT

AGM / Li-Ion
BATTERY OPTIONS



Highly Mobile Hybrid Power Generator



ABOUT US

With a legacy spanning 35+ years, Merlin Power is a leader in the design, supply, manufacture, and installation of advanced electrical power systems. Delivering field-proven power solutions for mission-critical military operations, Merlin Power works across the full spectrum: from high-performance platform batteries, battery monitoring and vehicle battery management systems, through to full vehicle system integration, in-house electrical and mechanical design, rapid prototyping, and high-voltage DC powertrain systems and components.

From rapid-delivery COTS components to fully integrated MIL-spec systems engineered to meet demanding DEFSTAN / MIL-STD requirements, Merlin Power helps ensure your platforms remain reliable, efficient, and combat-ready in any environment.

Merlin Power Defence Capabilities:

- High-performance platform batteries
- Full vehicle system integrations
- In-house electrical / mechanical design & rapid prototyping
- Battery monitoring & vehicle battery management systems
- High-voltage DC powertrain systems & components

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POWER WHERE YOU NEED IT. WHEN YOU NEED IT.

MP-X is a highly mobile, medium-to-large power solution for operating equipment up to 11.2kW (20kW peak output). It runs computers, comms, C-UAS, radar, weapons systems, tactical HQ, and medical and welfare equipment.

It brings a large battery bank and inverter for extended silent power, a UPS system, a power booster and a diesel generator together in one modular hybrid system. MP-X works standalone or in unison with grid supplies and other generators, including FEPS.

NATO Stock Number (NSN)

- SMALL FIELD POWER SYSTEM (MP-X) - AGM: 6110-99-368-1811
- SMALL FIELD POWER SYSTEM (MP-X) - LI-ION: 6115-99-936-7989

POWERS

COMPUTERS	COMMS	C-UAS	RADAR	WEAPON SYSTEMS	TACTICAL HQ
MEDICAL	WELFARE	I-STAR			



20kW
PEAK POWER OUTPUT

9h
SILENT @ 3kW

<10min
DEPLOY / PACK DOWN

500A
DC OUTPUT AT 24V

ONE SYSTEM, FIVE WAYS TO POWER YOUR MISSION

Selectable operating modes cover silent battery power, generator-backed continuous supply, uninterruptible backup and grid boosting.

01

24V DC BATTERY POWER

Up to 500A at 24V for running DC-powered equipment. Import or export power to a vehicle.

02

230V AC SILENT POWER

The onboard inverter delivers up to 6.4kW continuously. At a continuous 3kW, the system will operate for 4 to 9 hours silently depending on battery type.

03

CONTINUOUS AC & DC

Full continuous power on both AC and DC with the generator running.

04

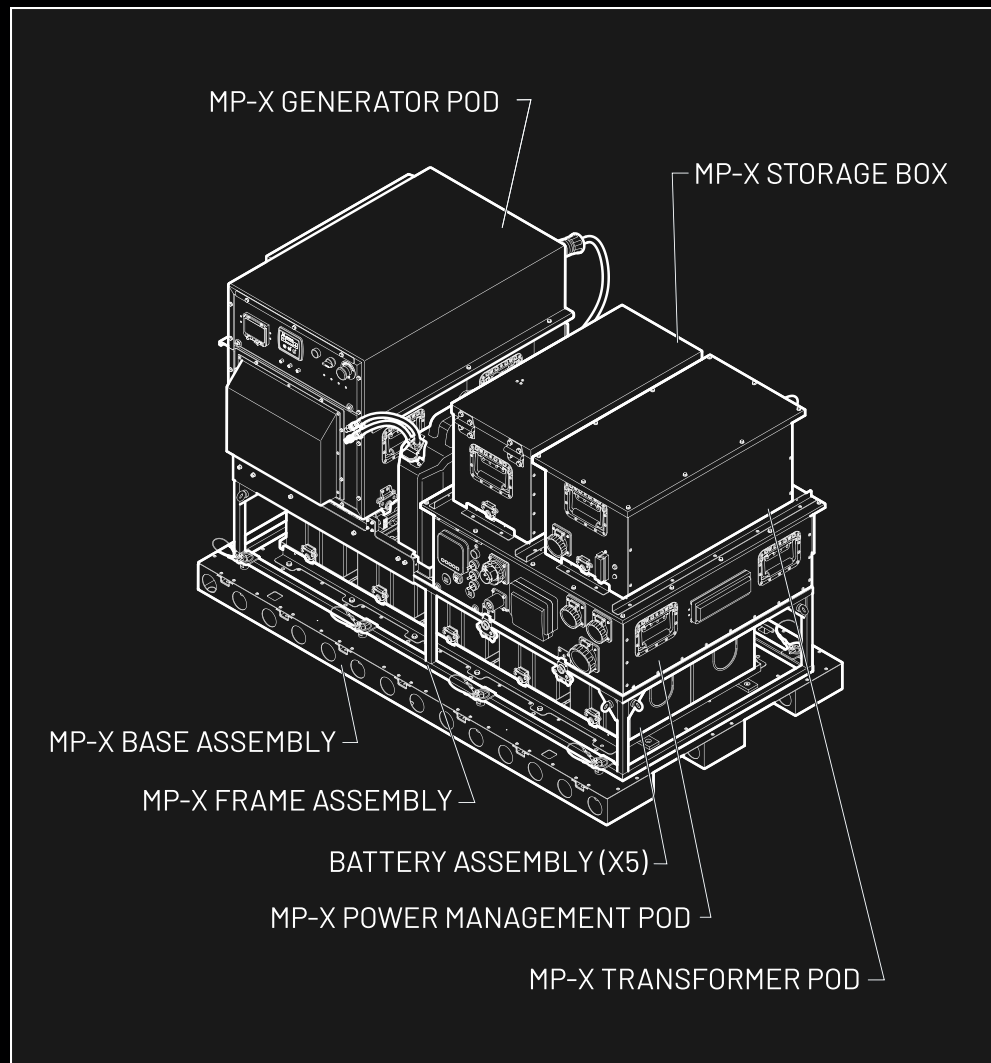
UPS

Uninterruptible, break-free backup for grid supplies and power at a FOB, for example FEPS supplies.

05

POWER BOOST

Combines grid or FEPS with the internal inverter to pull up to 6kW (12kW peak) more. A 20kW FEPS runs 25kW continuous / 32kW peak.



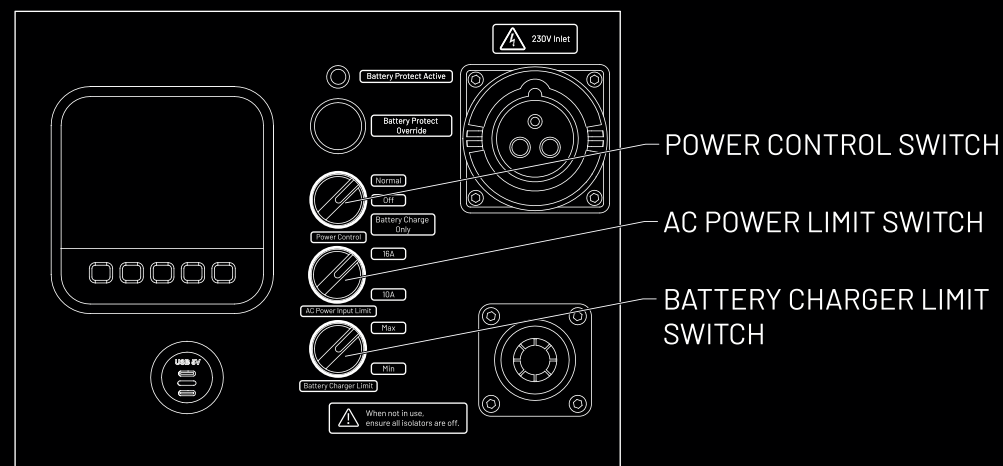
FORWARD-DEPLOYABLE IN MINUTES, BY HAND

HIGHLY MOBILE

Built for forward deployment without materials handling equipment, aboard virtually any vehicle. MP-X breaks into modules that 2 to 4 people can carry, and deploys or packs down in under 10 minutes with no tools. It can be operated while loaded on a vehicle, trailer or UGV for immediate power on the move.

EASY TO USE

Most functions are fully automatic. Three selector switches manage the whole system.



2-4
PERSON LIFT PER MODULE

<10min
DEPLOY / PACK DOWN

0
TOOLS NEEDED

SYSTEM COMPONENTS

Selectable operating modes cover silent battery power, generator-backed continuous supply, uninterruptible backup and grid boosting.

PARAMETER	LEAD ACID AGM	LITHIUM-ION
Runtime @ 3kW	Up to 4 hrs	Up to 9 hrs
Runtime @ 1.5kW	Up to 8 hrs	Up to 18 hrs
Cold weather	Extreme cold & hot	Heated. -10°C recommended (-20°C min)
Standard	TPPL NATO 6T (DEF-STAN 61-021 / MIL-PRF-32143)	-

AGM uses the standard TPPL NATO 6T battery, widely held in NATO supply lines, interchangeable with vehicle auxiliary batteries, battle-damage resistant and air-shippable.

GENERATOR POD

4.8kW continuously rated diesel generator. Manual or automatic start/stop (according to battery state of charge) and standard issue jerry cans used as fuel tank for quick, easy filling and replacement.

Generator can be removed from system (with optional extended cable set) and located away from rest of system or dug in.

INVERTER POD

8kVA pure sine-wave inverter, 200A charger and changeover. When external grid supply or generator is active, the charger delivers rapid recharging to the batteries, and 230V power is delivered to your loads.

The inverter also provides near break-free switchover when the generator turns off, and parallels to boost supply up to 12.8kW, subject to state of charge.

DATACELL MONITOR

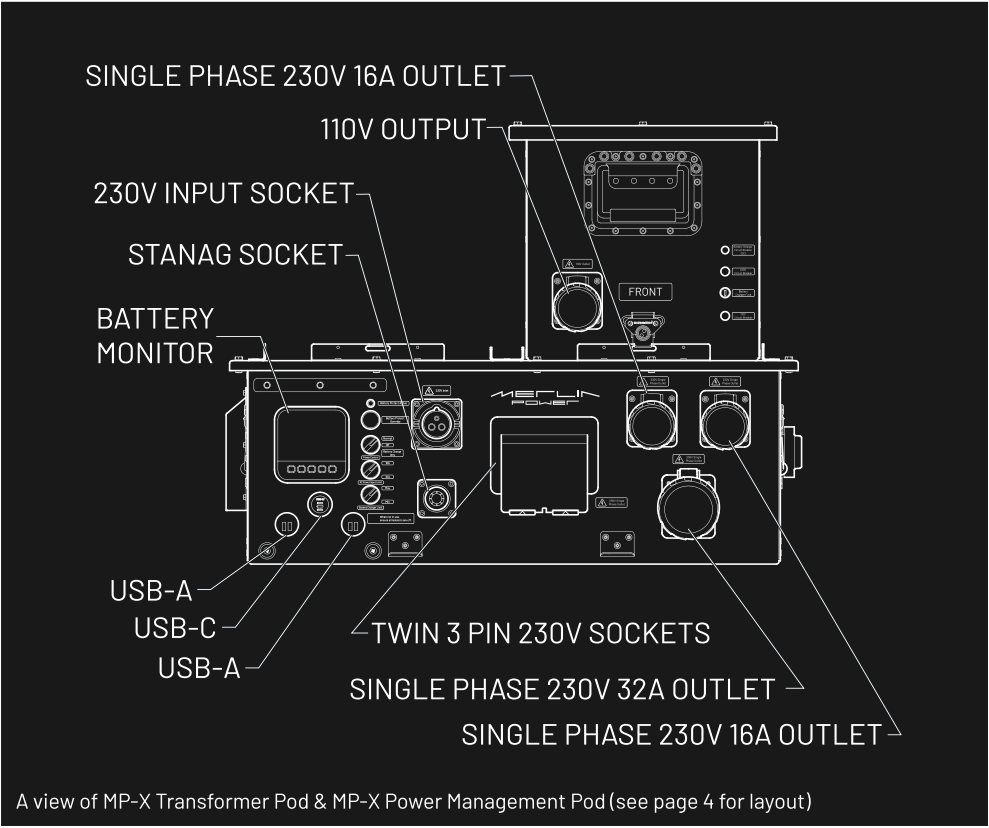
The system is managed by DataCell – the “World’s most accurate battery monitor” to automate power functions and provide protection against flat batteries.

The displayed data provides the user with a clear, easy to understand display which includes battery state of charge % (SoC%), time remaining until flat and battery state of health (SoH%).

POWER INTERFACES

- USB A and USB C
- 500A 24V DC STANAG vehicle connector
- 2x 230V 16A commando outputs
- 1x 230V 32A commando output
- 2x 230V UK 13A sockets
- 1x 110V 16A commando

Other specific outlets can be incorporated on request.



MP-X AT A GLANCE

INVERTER	8kVA (6.4kW) pure sine-wave
GENERATOR OUTPUT	4.8kW
PEAK OUTPUT POWER	20kW
DC OUTPUT	up to 500A at 24V
SILENT RUNNING @3kW	Up to 9 hrs
SILENT RUNNING @1.5kW	Up to 18 hrs
DEPLOY / PACK DOWN	<10 min, no tools required
BATTERY OPTIONS	Lead Acid AGM or Lithium-Ion
AGM NATO STOCK NUMBER	SMALL FIELD POWER SYSTEM (MP-X) - AGM: 6110-99-368-1811
LI-ION NATO STOCK NUMBER	SMALL FIELD POWER SYSTEM (MP-X) - LI-ION: 6115-99-936-7989

*All specifications are provided in best possible faith but may be subject to change without notice. All business is transacted according to our Standard Terms & Conditions, a copy of which is available upon request.

POWER IN ACTION

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