

DISTRIBUTION UNIT FOR POWER HUB 50 & 100



INTELLIGENT POWER CONVERSION & ENERGY DISTRIBUTION.

For more than 25 years, XAP Technology has been developing advanced electronic systems, power electronics and energy management solutions for some of the most demanding motorsport and electrification programs. Leveraging expertise gained through Formula E, endurance racing and industrial electrification projects, XAP designs complete energy ecosystems where storage, conversion, distribution and supervision are fully integrated.

The XAP POWER HUB DISTRIB reflects this expertise by providing the critical interface between stored energy, renewable energy sources, electrical networks and end-users. Designed and assembled in France, it combines high-efficiency power conversion, advanced protection systems and real-time supervision into a single modular platform.

More than a power converter, the POWER HUB DISTRIB is the energy intelligence layer that enables reliable, flexible and scalable deployment of stationary storage solutions from 50 kWh systems to multi-megawatt-hour installations.

STORE — CONVERT — DISTRIBUTE.

TURNING STORED ENERGY INTO USABLE POWER.

BIDIRECTIONAL ENERGY CONVERSION:

Convert energy seamlessly from DC to AC and AC to DC, enabling battery charging, energy storage and power delivery through a single platform.

ON-GRID & OFF-GRID OPERATION:

Operate alongside an existing electrical network or create a fully autonomous microgrid wherever power is required.

RENEWABLE ENERGY INTEGRATION:

Directly connect photovoltaic systems and other DC or AC energy sources to maximize self-consumption and energy independence.

MODULAR & SCALABLE ARCHITECTURE:

Compatible with the entire XAP POWER HUB ecosystem, from 50 kWh mobile units to multi-MWh containerized energy infrastructures.

ADVANCED MONITORING & TELEMETRY:

Continuous 20 Hz data acquisition enables real-time supervision, predictive maintenance and energy optimization.

INDUSTRIAL RELIABILITY:

Integrated electrical protections, proprietary energy management logic and high-efficiency conversion ensure long-term operational performance.

SOVEREIGN ENGINEERING:

Designed, assembled and qualified in France with full traceability and accountability throughout the energy chain.

TYPICAL APPLICATIONS

Construction kit	Construction sites Temporary installations / Events Remote operations / Mobile workshops
Solar kit	Solar farms / Agricultural facilities Industrial self-consumption Hybrid microgrids
EV charging kit	EV Fleets Utility vehicles / Municipal fleets Temporary charging solutions
HVE charging kit	Construction machinery Fast charging operations Mobile charging hubs

MORE INFORMATION ON WWW.XAP.FR



► BATTERY - BMS/CMU - DC/DC - CASING: **POWER HUB 50 & 100 - DISTRIBUTION UNIT**

CORE TECHNICAL SPECIFICATIONS

Dimensions	425 mm × 600 mm × 1050 mm
Operating temperature	-10°C to +50°C
AC Voltage Range	156 VAC to 530 VAC
DC Voltage Range	150 VDC to 1000 VDC
AC Grid Compatibility	On-grid (synchronization with existing AC grid) Off-grid (standalone AC power generation)
Power Conversion	AC to DC and DC to AC
DC Interoperability	DC source hot-swap capability
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Telemetry	Real-time monitoring data from connected loads and power sources transmitted at 20 Hz for analysis and energy management
Electrical protection	Circuit breakers, RCDs, fuses, disconnect switches

POWER CONVERSION PERFORMANCE

ON-GRID OPERATION	
AC output power	60 kW (66 kVA)
DC charging power	60 kW
Maximum efficiency	97%
Full load efficiency	96.5%
OFF-GRID OPERATION	
Autonomous AC output power	54.1 kW (60 kVA)
Frequency	50 / 60 Hz
Grid forming capability	Yes

CONSTRUCTION KIT

Weight	75 kg
400 V outlets	2 × 32 A
230 V outlets	6 × 16 A
DC output	1 × 400 V
EV Charger (AC)	22 kW integrated charger

SOLAR KIT

Weight	50 kg
PV inputs	8
Conversion	DC/DC and DC/AC

EV CHARGING KIT (AC Charge)

Weight	80 kg
Charging connectors	2 × type 2
Charging power	22kW per outlet

HVE CHARGING KIT

Weight	150 kg
DC charging output	1
Charging power	50+ kW

REFERENCES

PFXXXX	POWER HUB DISTRIBUTION UNIT - CONSTRUCTION
PFXXXX	POWER HUB DISTRIBUTION UNIT - SOLAR
PFXXXX	POWER HUB DISTRIBUTION UNIT - HV CHARGING
PFXXXX	POWER HUB DISTRIBUTION UNIT - HVE CHARGING