

MPC Modular Power Control



ONE ARCHITECTURE, EVERY VOLTAGE

The XAP MPC embodies a new generation of multi-voltage embedded electrical architectures.

Designed to simultaneously manage 12 V, 24 V, and 48 V systems, it ensures **intelligent and secure** power distribution across control, auxiliary, and high-power functions.

With its central XAP controller and seamless CAN/LIN communication, the MPC guarantees **easy integration**, optimal performance, and full compatibility with the most demanding applications.

XAP electronic powerboxes integrates an **Event Data Recorder (EDR)**, acting as a black box to store critical parameters during abnormal events.

MPC is also equipped with an advanced **Rollover Protection System (ROPS)** ensuring occupant safety in case of overturning."A scalable, connected, and future-ready solution for next-generation electrified platforms.



SCALABLE, CONNECTED, EFFICIENT

MULTIPLE ELECTRICAL NETWORK MANAGEMENT

EVENT DATA RECORDER (EDR)

Triggered on detected shocks or overcurrent detection

ROLLOVER PROTECTION SYSTEM (ROPS)

switch the system off in case of crash

OVERCURRENT CONTROL AT 100mA ACCURACY

Wire Section Reduction
Harness Weight Reduction

OUTPUT STATUS AND CONSUMPTION DIAG

OUTPUT CONFIGURABLE PARAMETERS:

- Overcurrent blanking time
- Maximum current value
- Continuous or alternating output (flashing)
- Memory effect control at power OFF
- Delayed command applied
- Automatic resetting strategy in case of overcurrent (returned)

HEAVY DUTY CONNECTOR

MAIN BATTERY RELAY MANAGEMENT (FIA)

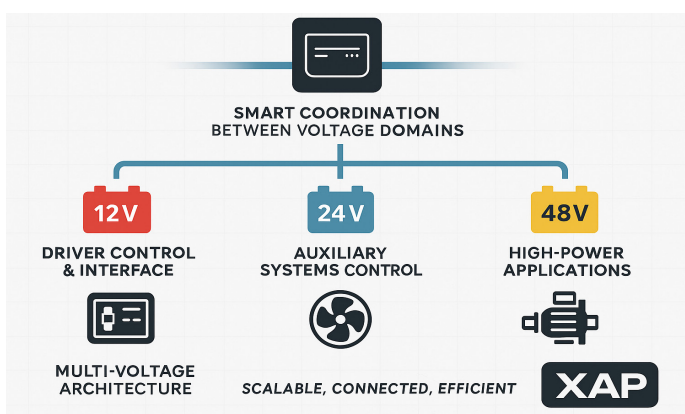
FULLY CONFIGURABLE WITH PC SOFTWARE

AVAILABLE PROTOCOL:

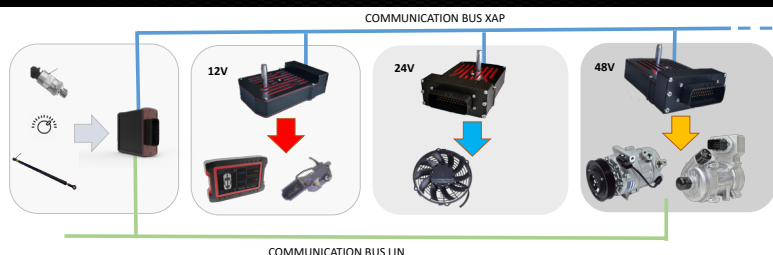
- CAN
- NMEA
- SAE J1939
- OBD2

AVAILABLE COMMUNICATION:

- CAN
- RS232/RS485
- LIN
- ETHERNET



MORE INFORMATION ON WWW.XAP.FR



► ELECTRONIC DISTRIBUTION SYSTEM *MPC SYSTEM*

TECHNICAL SPECIFICATIONS

Processor	STm32
Power Supply logic	up to 75V
Inputs	
Analog / Digit 0-5V	10
Temperature TCK	2
Passive Relay command FIA	2
Extra Analog/digit	4 *
Extra Digit	1 **
Output	
5V power supply	2 (1A)
Communication	
CAN	2
CAN xap	1
LIN	2 **
Ethernet	1 *
Serial Com RS232/485	1 *
Features	
Auto-detect Power module	yes
Soft Start to avoid current draw	yes
EDR Event Data Recorder	yes
ROPS Rollover Protection Syst.	yes
Under Voltage detection	yes
Over Voltage detection	yes
PWM	yes

- * ethernet output can be:
- ethernet up to 100M
 - 4 Analog/digit
 - RS 485 / 232
- ** LIN output can be:
- LIN
 - Digit input

Over Current detection at 100mA all outputs	yes
Lost communication default	yes
Logic & Power separate	yes
OBD2 protocol	yes
NMEA protocol	yes
Pre programmed basic functions	yes
IMU accelerometer 6 axis	up to 16g
IMU Gyroscope	up to 2000°/s
Freewheeling diode protection all outputs	yes
2 feedback leds (voltage, default)	yes

Dimension CMD	129x108x42
Weight CMD	440g
Dimension Power Module	160x100x44
Weight Power Module	750g

REFERENCES

PF0894	MPC-CMD
PF0895	MPC-HB
PF0896	MPC-LP



MORE INFORMATION ON
[HTTPS://STORE.XAP.FR](https://store.xap.fr)

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