

MAX2 EV Charging Control Unit

- UP TO 2 MODE-3 EV CHARGE SOCKET MANAGEMENT
- CP, PP VEHICLE COMMUNICATION SIGNALS
- ENERGY METER CONTROL
- POWER CONTACTOR CONTROL OUTPUTS
- LOCKING ACTUATORS CONTROL OUTPUTS
- LCD DISPLAY INTERFACE
- REAL TIME CLOCK (RTC)
- BUZZER
- SIGNALING OUTPUTS (LED AND LAMPS)
- RFID READER INTERFACE
- DIAGNOSTIC INPUTS
- NETWORK CONNECTIVITY INTERFACE (LOCAL PROXY)
- GPIOs FOR EXTERNAL DEVICES INTERFACING
- 24VDC POWER SUPPLY
- BACKUP BATTERY MANAGEMENT
- COMPLIANT WITH IEC/CEI/EN 61851-1 REGULATIONS

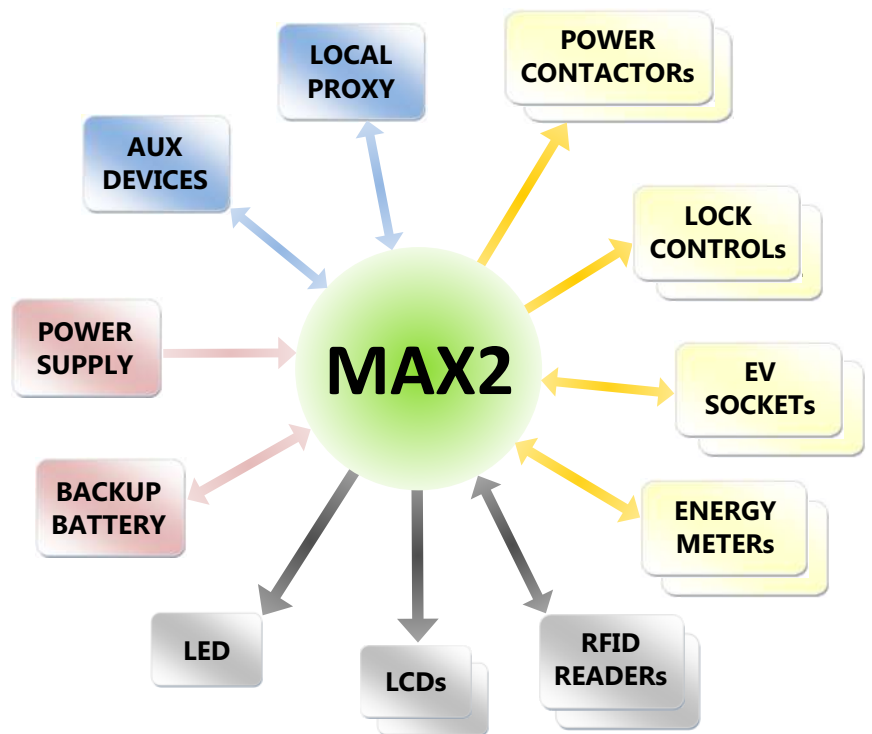
MAX2 is an advanced controller designed for mode-3 EV charging stations management and it is the core of the In-PRESA division by Generale Sistemi.

It can manage up to two charging sockets. MAX2 features stand alone and network work mode to implement LAN and WEB charging station monitoring and control systems.

MAX2 is well suited for EV charging station system integrators and complies with IEC/CEI/EN 61851-1 regulations.

MAX2 is fully configurable and open to new customizations. It can be generally used also to implement the energy management in various systems like Parkings Areas, Campings, Harbours and much more.

Many software versions are available for different applications: FREE, PERSONAL, NET, WEB, FIDELITY, OCPP.



ZE Ready®

OCPP
Open Charge Point Protocol

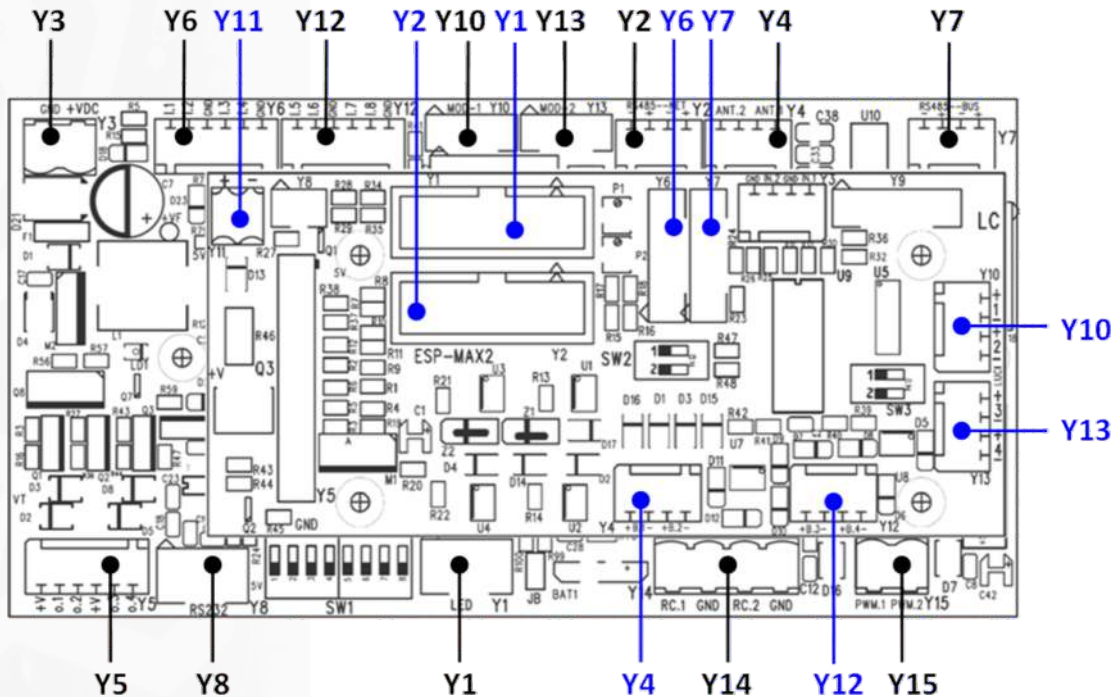
((RFID))



SPECIFICATIONS:

POWER SUPPLY	+24V DC 24 VDC BACKUP BATTERY (OPT.)	CURRENT CONSUMPTION	200 mA @ 24VDC (max 2A)
EV CHARGE IEC-61851	CONTROL PILOT (CP) PROXIMITY PILOT (PP)	SIGNALING	5 x LED OUTPUTS, BUZZER
INTERFACES	2 x RFID READER ,2 x LCD DISPLAY , ENERGY METERS (PULSE AND RS-485 INTERFACE), 125kHz RFID ANTENNA INTERFACE	OUTPUTS	4 x POWER CONTACTOR DRIVING OUT (max 2A), 4 x LOCKING ACTUATOR DRIVING OUT, 4 x 24VDC LAMPS
INPUTS	8 x NC CONTACTS, 3 x DIP-SWITCH	OTHER	REAL TIME CLOCK, TEMPERATURE MESUREMENT WITH THERMISTOR (OPTIONAL)
OPERATING RANGE	-20° ÷ 60° C	CERTIFICATIONS	EMC 2004/108/EC R&TTE 1999/5/EC CEI EN-61851-1
DIMENSIONS	137 x 72 x 45 mm (L x W x H)	WEIGHT	200 g
MOUNTING	HOLES FOR DIN BAR MOUNTING BRACKETS		

CONNECTIONS



Y1	LED OUTPUTS
Y2	125kHz RFID ANTENNAS (OPTIONAL)
Y3	POWER SUPPLY
Y4	NETWORK RS-485 INTERFACE
Y5	POWER CONTACTOR OUTPUTS
Y6	PULSE EN.METER AND CLEAN CONTACT INPUTS
Y7	RS-485 ENERGY METER INTERFACE
Y8	RS-232 CONFIGURATION INTERFACE

Y10-Y13	RFID READER
Y12	RCBO CONTACTS AND SPARE INPUTS
Y14-Y15	EV-CHARGE IEC-61851 SIGNALS
Y1-Y2	LCD CONNECTORS
Y4-Y12	LOCKING ACTUATOR OUTPUTS
Y6-Y7	LOCKING ACTUATOR INPUT CONTACTS
Y10-Y13	24VDC LAMPS (OPTIONAL)
Y11	BACKUP BATTERY

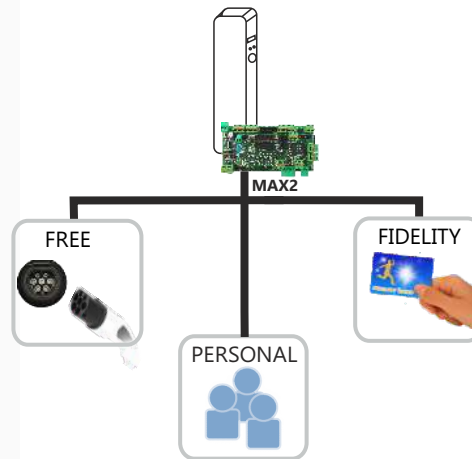


WORKING MODES

FREE: this version is suited for open charging systems, where no authorization are set. Every user can access to charging systems simply using its charging plug.

PERSONAL: this version is designed for private Charging Points. Only authorized users can use the charging point using RFID User Card. Authorized users can be programmed in the internal memory of the MAX2 using a RFID Master Card.

OFF-LINE



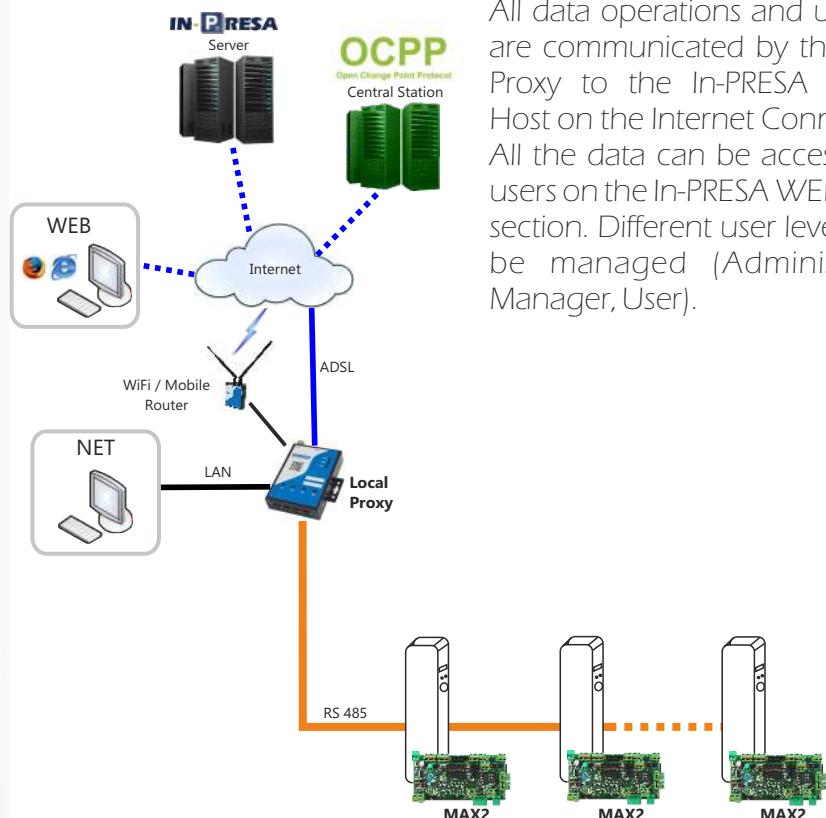
FIDELITY: ideal for all those concessions of electric recharge, free mode but also with prepaid credit decrementation (Time or Energy based) an well suited for a circuit of loyal customers. Each charging point can operate in stand alone mode (the operation is so managed directly on the user card) or in network mode NET or WEB mode (the operation is managed by the Local Proxy or by the In-PRESA central Host).

NET: NET software is designed to add Local Area Network connectivity to EV charging stations. It is well suited for private charging circuits like parking, condos and companies.

The Local Proxy manages an internal user database and monitors all the EV charging stations. All the data can be accessed by WEB browser on a PC connected through a Local Network. NET software allows the user to get a real time status for the stations and to save data reports.

OCPP: Open Charge Point Protocol (OCPP) is an internationally established open protocol for the communication between EV charge stations and charge station networks. It has been adopted in 50 countries and used on about 10.000 EV charging stations. The Local Proxy can add OCPP connectivity to the EV Charging Stations to allow the integration in OCPP networks.

ON-LINE



WEB: WEB software is designed to add Network connectivity to EV charging stations especially for public systems management. All data operations and user lists are communicated by the Local Proxy to the In-PRESA Central Host on the Internet Connection. All the data can be accessed by users on the In-PRESA WEB portal section. Different user levels can be managed (Administrator, Manager, User).