OCPP

https://silla.industries/en/docs/prism-howto-ocpp/

Introduction

OCPP (Open Charge Point Protocol) is a communication protocol that enables communication between charging systems such as Prism Solar and a charging point management server, called **Central System**.

Through OCPP, the Central System can control and manage the various recharge points for operations such as recharge reporting, authorization through RFID cards, and management of recharge rates. OCPP is therefore suitable for all those scenarios where it is necessary to manage multiple recharge points, also installed in different locations and geographic areas, and to account for recharges.

OCPP is also critical in all contexts in which **CPOs** (Charge Point Operators) and **eMSPs** (e-Mobility Service Providers) that provide charge point management services via the OCPP protocol operate.

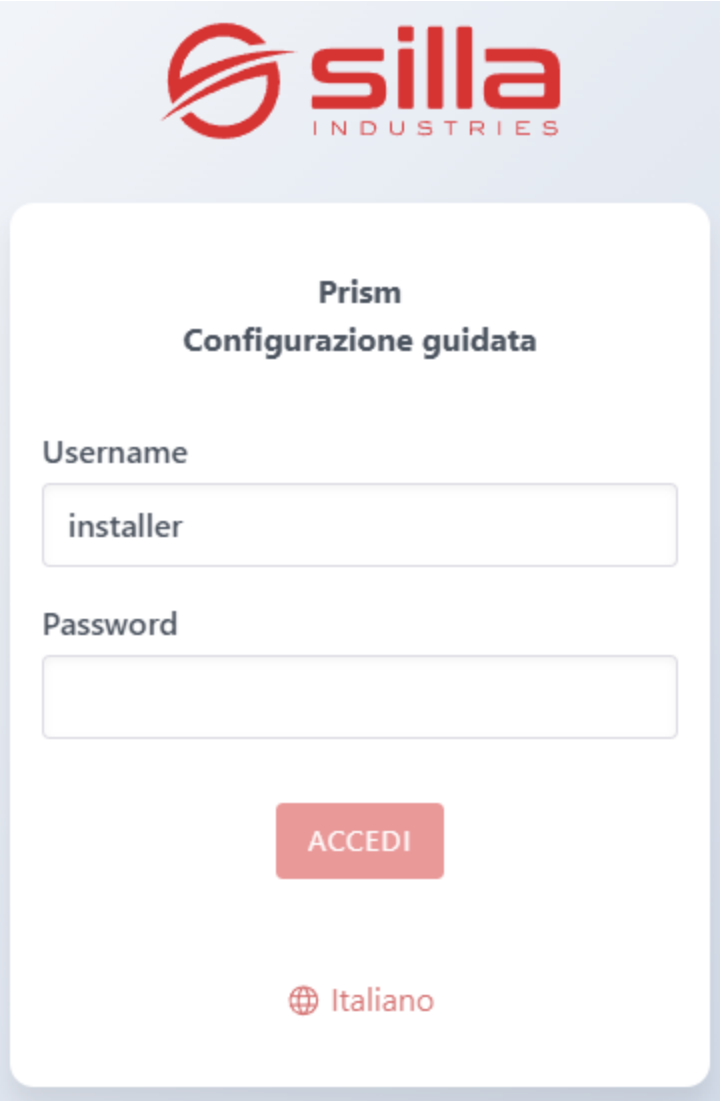
Refer to the Technical Features chapter for technical features related to OCPP.

Configuration

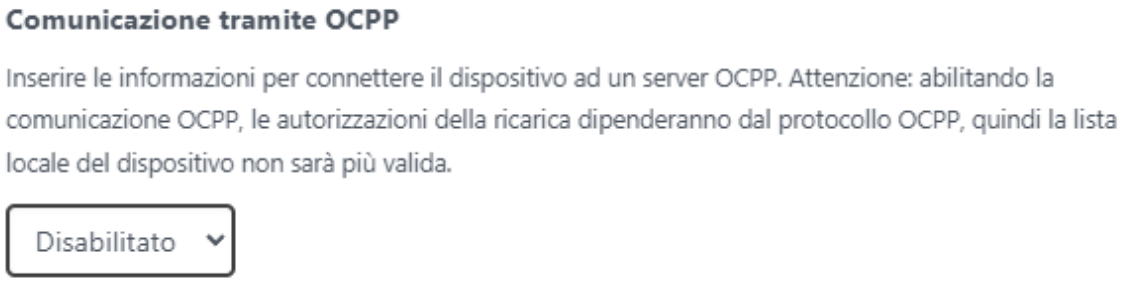
OCPP configuration requires only the configuration of the parameters of the Central System you wish to connect to.

Central System data to be used during configuration, such as URL and Serial Code should be requested from the Central System manager.

1. Connect to Prism's WiFi network and visit http://192.168.8.1/benvenuto:



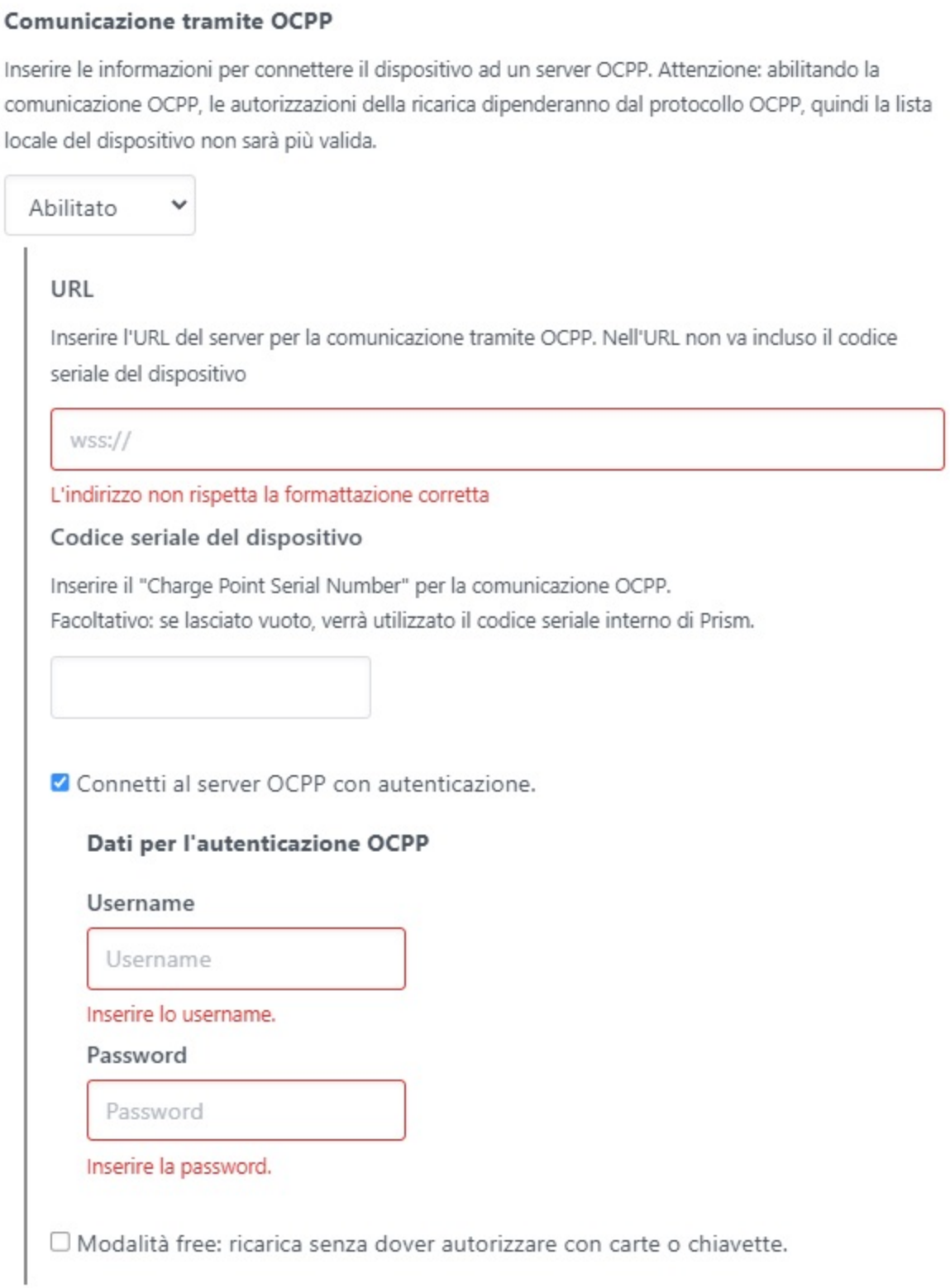
2. Enter the "installer" login credentials and scroll down the Guided Configuration page to the **Communication via OCPP** section:



3. Press on the drop-down menu and select "Enable" to enable the compilation of the parameters to be configured:



4. Configure OCPP parameters:
   - **URL**: OCPP Central System URL.
   - **Device serial code**: also called Charge Point Serial Number, a serial code that identifies the Prism.
   - **Authentication**: in case the Central System requires authorization, check the corresponding value and enter **user** and **password** provided by the manager.


Comunicazione tramite OCPP
Inserire le informazioni per connettere il dispositivo ad un server OCPP. Attenzione: abilitando la comunicazione OCPP, le autorizzazioni della ricarica dipenderanno dal protocollo OCPP, quindi la lista locale del dispositivo non sarà più valida.
Abilitato
URL
Inserire l'URL del server per la comunicazione tramite OCPP. Nell'URL non va incluso il codice seriale del dispositivo
wss://
L'indirizzo non rispetta la formattazione corretta
Codice seriale del dispositivo
Inserire il "Charge Point Serial Number" per la comunicazione OCPP.
Facoltativo: se lasciato vuoto, verrà utilizzato il codice seriale interno di Prism.
Connetti al server OCPP con autenticazione.
Dati per l'autenticazione OCPP
Username
Username
Inserire lo username.
Password
Password
Inserire la password.
Modalità free: ricarica senza dover autorizzare con carte o chiavette.

5. Press "Next."

Specifications

The following are the technical characteristics of OCPP for Prism Solar and Solar S.

Features - Feature Profiles

The **feature profiles** supported by Prism Solar and Prism Solar S are:

- **Core.**
  - Basic functionality for starting, authorization, configuration, transaction and remote control of EVSE.
- **Firmware Management**.
  - File management and remote Firmware update.
- **Local Auth List Management**.
  - Local authorization management for recharge-enabled users.
- **Reservation**.
  - Support for reserving a charging connector.
- **Remote Trigger**.
  - Support for triggering messages from EVSE to receive the latest information or to resend messages.

Configurations - Configuration Keys

Configuration Key	Value
GetConfigurationMaxKeys	10
LocalAuthListMaxLenght	10
SendLocalListMaxLenght	10
WebSocketPingInterval	60

Security - Security Profiles

Cipher suite:

- TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256 & TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384.

Security profile:

- Security Profile 1 - Unsecured Transport with Basic Authentication.
- Security profile 2 - TLS (1.2 or higher) with Basic Authentication.