

# Reliable Connectivity and Un-attended Kiosks Solution for EV Charging



# **Challenges of EV Charging Operations**

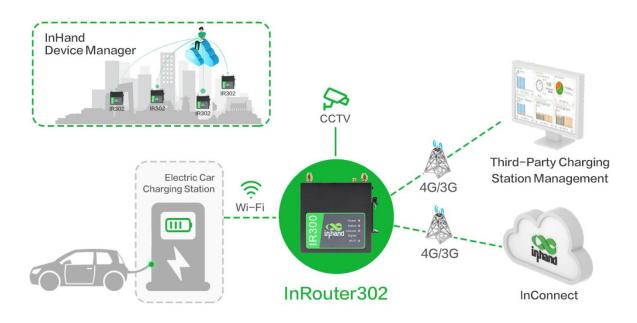
- Management EV Charging stations need to be connected to a centralized management system for efficient operation and management. InHand Networks provides secure and functional communication hardware for the EV charging manufacturers, operators, and distributors.
- Installation IT staff not available for every installation job.
- Maintenance & Trouble Shooting supporting increasing deployments.
- Supporting Multiple Functions various payment options, digital advertisement, security.

### **Reliable Connectivity for EV Charging Station**

InHand Networks InRouter302 - our fully industrial cellular router provides a stable and secure connection to operator's platforms to ensure that the EV chargers are always operating to their full potential. Wireless connections using 4G or LTE routers, however, require no additional cables and provide the flexibility to be added to or integrated into EV charging points with an easily preconfigured mass deployment.

• InConnect - pre-configured plug & play secure VPN network and device management.

### **Topology**





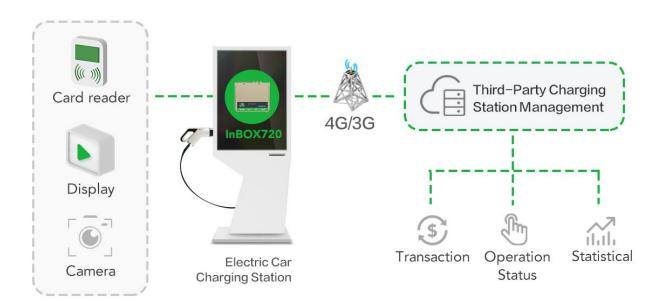
#### InHand Networks InRouter302

- Industrial Design Applying InHand Networks' constant principles for industrial design, certified for use in a wide temperature range from -20 ~ 70°C, EMC level 2, ideal for unattended sites and can withstand extreme outdoor environments.
- Reliable & Secure Networking Multiple link backups, VRRP hot backup and dual SIM Failover functionality enable automatic recovery of connection to realize continuous operation on any available network.
- Advanced Data Security Features- The IR302 offers multiple security mechanisms such as IPsec VPN, PPTP, OPEN VPN, etc.
- Free Remote Management Platform- We provide our customers with a 100% free Device Manager to allow for remote monitoring and maintenance of our InHand Networks devices.
- Wi-Fi Support multiple charging pumps to share the WAN connection.
- Manage From the Cloud- Monitor and manage the router remotely avoiding having to send out a technician to the physical location.
- Easy for Deployment No need to send IT staff for installation, plug and play devices with options available for preconfiguring.
- Multiple Network Carriers Supported AT&T, Verizon, T-Mobile, MNVOs, E-SIMs.
- Global Our devices are compatible with most global networks.

### **Smart EV Charging Kiosk**

Moreover, with continuously developed technologies such as cashless payment, EV charging is also becoming increasingly "smart", with simpler transactions and more user friendly interfaces. However, to achieve this level of smart technology(especially given that EV charging stations are dispersedly located), it is important that all the devices as well as their peripherals can be connected and accessed from a remote management center, where data of each station can be viewed in real time.

#### **Topology**





# InHand InBOX720 Industrial Computer for EV Charging Stations

#### • All-in-one Industrial Computer with 4G Connectivity

Supports 5G/4G network, provides uninterrupted network capabilities, whether in a business setting or an outdoor environment. With fault alerts, preventive maintenance can be conducted promptly so as to reduce downtime.

# • Supports Multiple Payment Options

Controllers of each charging stations as well as peripherals can be connected to the InBOX720 via different interfaces (serial ports, USB, Ethernet, HDMI, etc.).

## • Dynamic User Interface

InBox720 can be integrated with touchscreens, which supports 4K high resolution display and customized UI for EV charging application scenario. Also, dynamic display, interactive games, videos, ads, etc., not only relieves customer's boredom during waiting, but also brings extra revenue to operators.

#### • Open System, Compatible to Linux and Android Software

Android/Linux operation system supported, compatible with most mobile apps, and easy for development.

Preconfigured as field staff are generally not IT who check remotely.