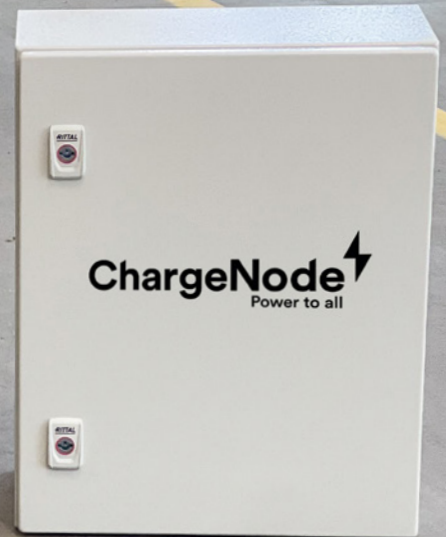


BoxNode



Take control of your charging stations with centralized connectivity and management. Everything fits into a small device we call BoxNode.

What challenges does BoxNode solve?

- ✓ **Remote Restart** - Monitors and can remotely restart charging stations, routers, and load balancing units in the event of a malfunction.
- ✓ **Central Connectivity** - Ensures reliable operation with >98% uptime.
- ✓ **Surge Protection** - Protects itself, the charging stations, and connected vehicles from power surges (legal requirement as of May 2024).
- ✓ **Minimizes the need for site visits** by facility owners and service personnel.
- ✓ **Can shut down the entire system** during maintenance, emergencies, or when a fire alarm is triggered.



Remote Restart

This feature allows remote restarting of charging stations, routers, switches, load balancers, and any additional accessories via GSM or RMS portal. It also confirms that the restart has been completed. Since the restart can be done remotely, there is no need for a site visit, resulting in cost savings for the facility owner. The restart can also be carried out at short notice, reducing downtime while waiting for an installer. During the restart process, the contactor is controlled by the 4G modem, which cuts power to the connected equipment for 180 seconds before restoring it. This ensures that all devices are fully reset—even those with internal backup batteries.

Central Connectivity

The 4G router supports multiple connection methods, including 4G with roaming and WAN connection via

the building's network. Monitoring and control occur over the GSM network and can also be managed through the Teltonika RMS portal. The RMS portal enables remote configuration and management of the BoxNode, significantly reducing the need for on-site visits. BoxNode operates at 24V and is powered via a C10A circuit breaker connected to the main supply for the charging stations.

Surge Protection

The monitored surge protection safeguards the BoxNode, charging stations, and vehicles from electrical surges caused by lightning or other induced voltage spikes. This feature meets legal requirements for public EV charging as of May 2024.

