MERGE
ELECTRIC FLEET SOLUTIONS

FLEXIBLE CHARGING

What will your EV charging operation need in 5 years? The same thing it needs today: flexibility. PowerRail™ is a modular, scalable, and movable solution that lets you start charging today and evolves along with your business. Minimize expenses and mitigate risks by leaving behind the complexities of trench digging, conduit installation, and utility-related delays.

Get your infrastructure out of the trench and contact us today at info@mergefleet.com.

	Traditional Approach	PowerRail ™	PowerRail ™ Advantages
Timing of Cost	100% Upfront	Minimal Upfront	Course correct as EVs arrive
Demand Charge	100%	50%	Smart power bus lowers demand 50-70%
Extendable	No	Yes	Pivot to vehicle and business changes
Future Proof	No	Yes	Pivot to technology changes
Relocatable	15%	70%	Pivot to changes in real estate; higher bankability
Climate Friendly	Lots of concrete	Recycled Materials	Low CO_2 circular economy solution

Comparing installation of L2 (48A) EVSEs for a depot roll out of 36 light duty EVs over 36 months.
Cost includes upfront planning, facility upgrade, hardware, and installation as well as ongoing services and utility demand.

Start charging your EV fleet in days, not months

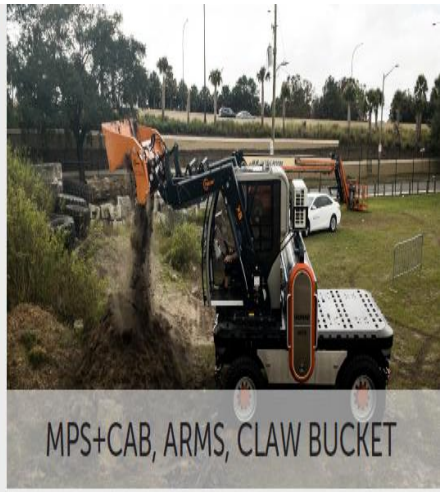
GET IN TOUCH info@mergefleet.com • (833) MERGE-EV

Introduction to DANNAR®

DANNAR
POWER TO TRANSFORM

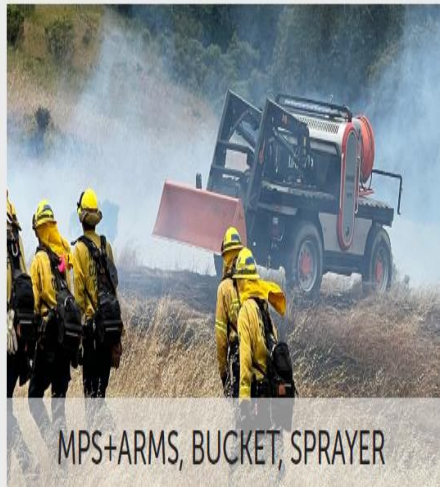

MPS+ARMS, CLAW BUCKET


MPS+ARM, BUCKET, SHOWING DISTANCE USE BY REMOTE


MPS+CAB, ARMS, CLAW BUCKET


MPS+HITCH


MPS+ARMS, FORKLIFT, SCISSORLIFT


MPS+ARMS, BUCKET, SPRAYER

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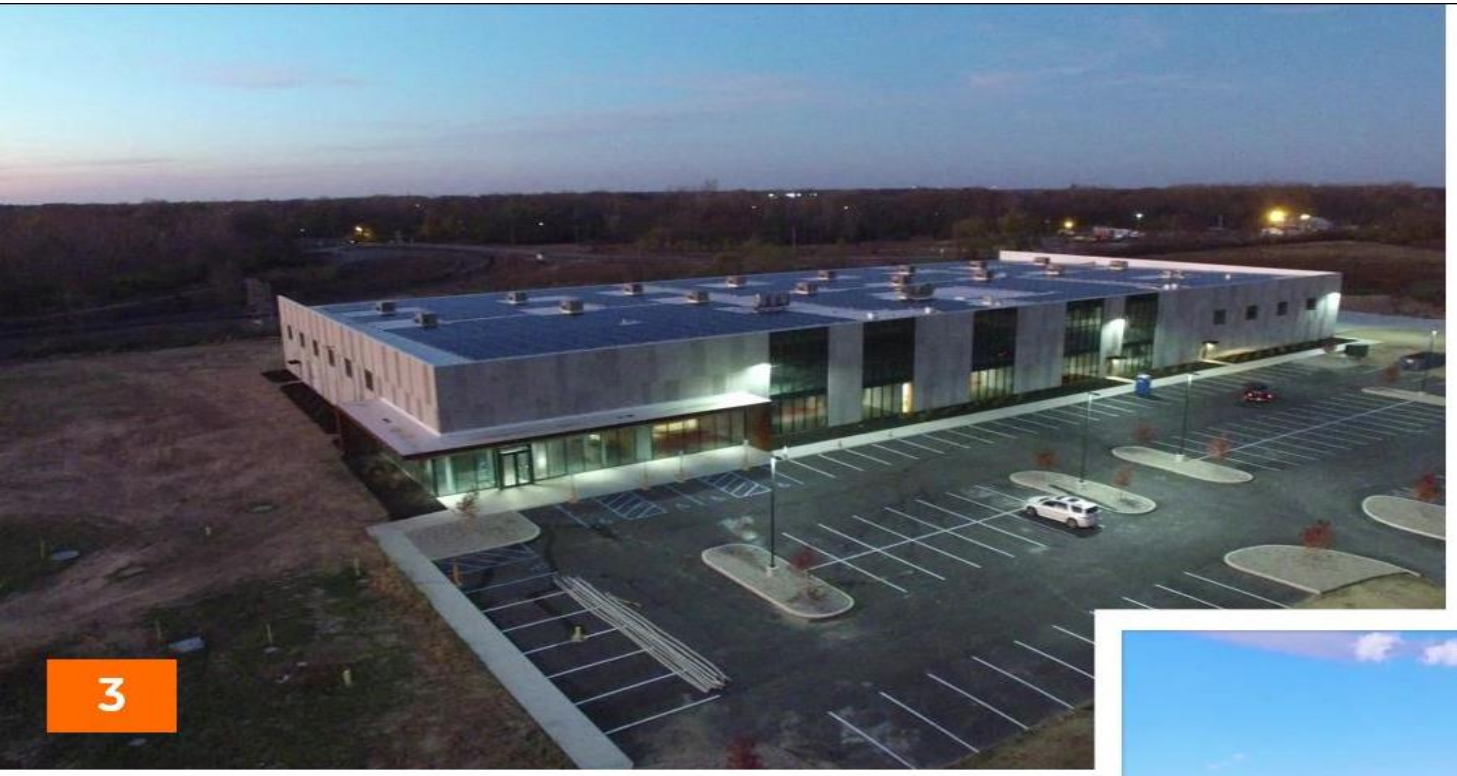
The New DANNAR!



MPS®
MOBILE POWER STATION®

DANNAR®
POWER TO TRANSFORM

DANNAR – Your partner to accelerate the transition to net zero

DANNAR
POWER TO TRANSFORM

Based in Indiana, USA, DANNAR manufactures and sells the Mobile Power Station® (MPS®), the leading electric multi-purpose heavy work machine and energy storage solution

The MPS® provides customers with a new work and energy platform to accelerate the transition **to net zero**. Operators can configure the MPS® with up to 250 work attachments or use the platform to deliver power where needed

12 Years

Developing mobile power and work solutions

9+ Industries

MINING
CONSTRUCTION
MUNICIPAL
AGRICULTURE
MILITARY
UTILITIES
AIRPORTS
HIGHER ED
HOSPITALITY

The MPS® is a mobile platform with a wide range of capabilities for heavy duty work, aux remote power supply, and mobile EV Charging - All with Zero Emissions

250+
ATTACHMENTS

8K
CHARGE CYCLES

500
kWh EXPORTABLE

0/0
EMISSIONS/ FUEL COSTS

CONNECTED

REMOTE, MANUAL or AUTONOMOUS features

CLEAN

INTUITIVE

250 kWh

375 kWh

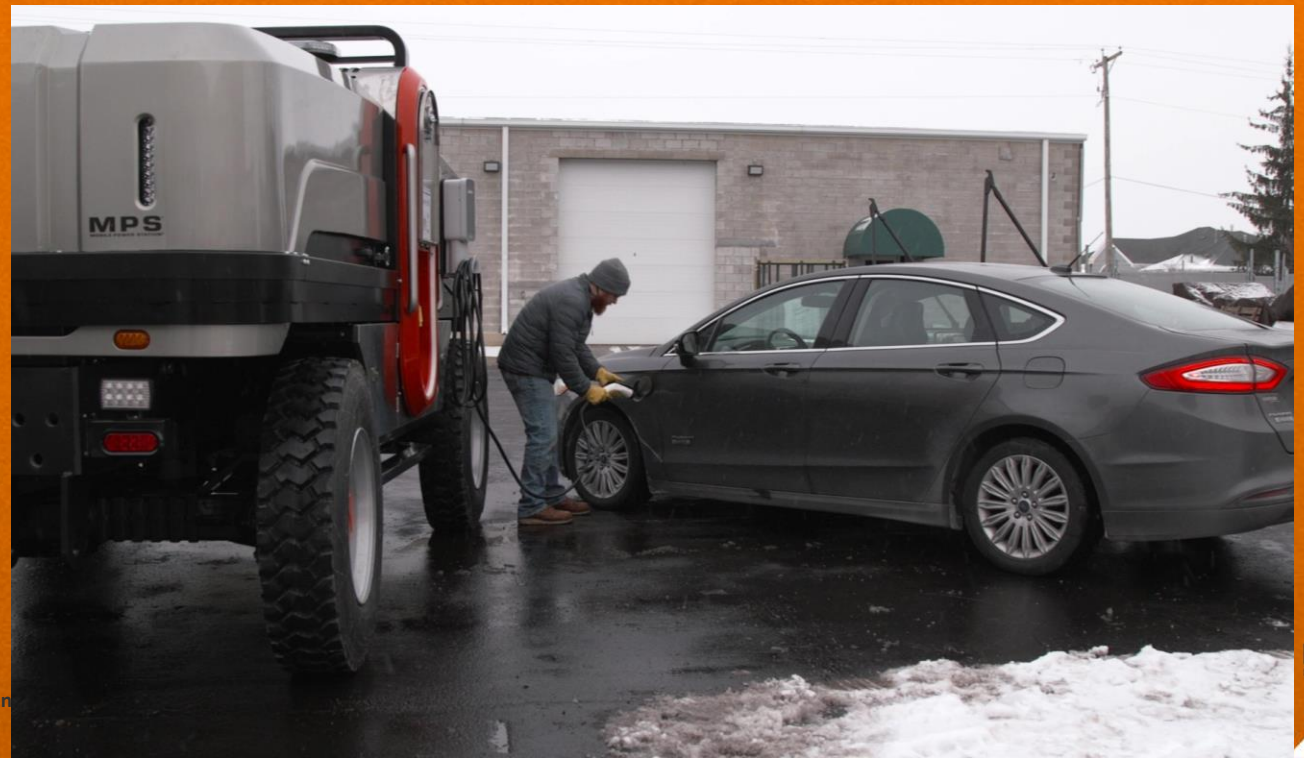
500 kWh

DANNAR delivers and supports your MPS, based on your needs for **work tasks or energy storage.**

DANNAR
POWER TO TRANSFORM

DANNAR
POWER TO TRANSFORM

Export power from all DANNAR Mobile Power Stations ®
250 kWh – 375 kWh – 500 kWh



DANNAR®

DANNAR®
POWER TO TRANSFORM

DANNAR MPS 500 - Flexible Electricity Resource:

Inbound Power:

- Base unit – Level 2 AC Fast charge
- Base unit – Level 3 DC Fast charge 60
- Option - In-bound 480 3Phase
  - Charge MPS Directly from Panel No EV Charger – Fast!

Outbound Power:

- Base Unit - Export Panel
  - 120 V 20A and 240 V 50A
  - Level II EV Charger
  - Option – Extra 2 DC Fast Chargers – 60kW each
  - Option Bi-Directional 480 3Phase
    - Output in 480 3Phase

MPS 500 - Flexible Electricity Resource – Options Highlighted

Optional Inbound Power:

- 480V 3-Phase – 100kW
- Re-Charge the MPS from the 480 Panel
- No EV Charger Needed for the MPS

Optional Outbound Power:

- DC Fast Chargers (optional) – 120kW max
- 480V 3-phase power – 275kW

MPS: Power to Transform

CAPACITY: up to 500 kWh of clean power

MOBILITY: Deliver power directly where needed

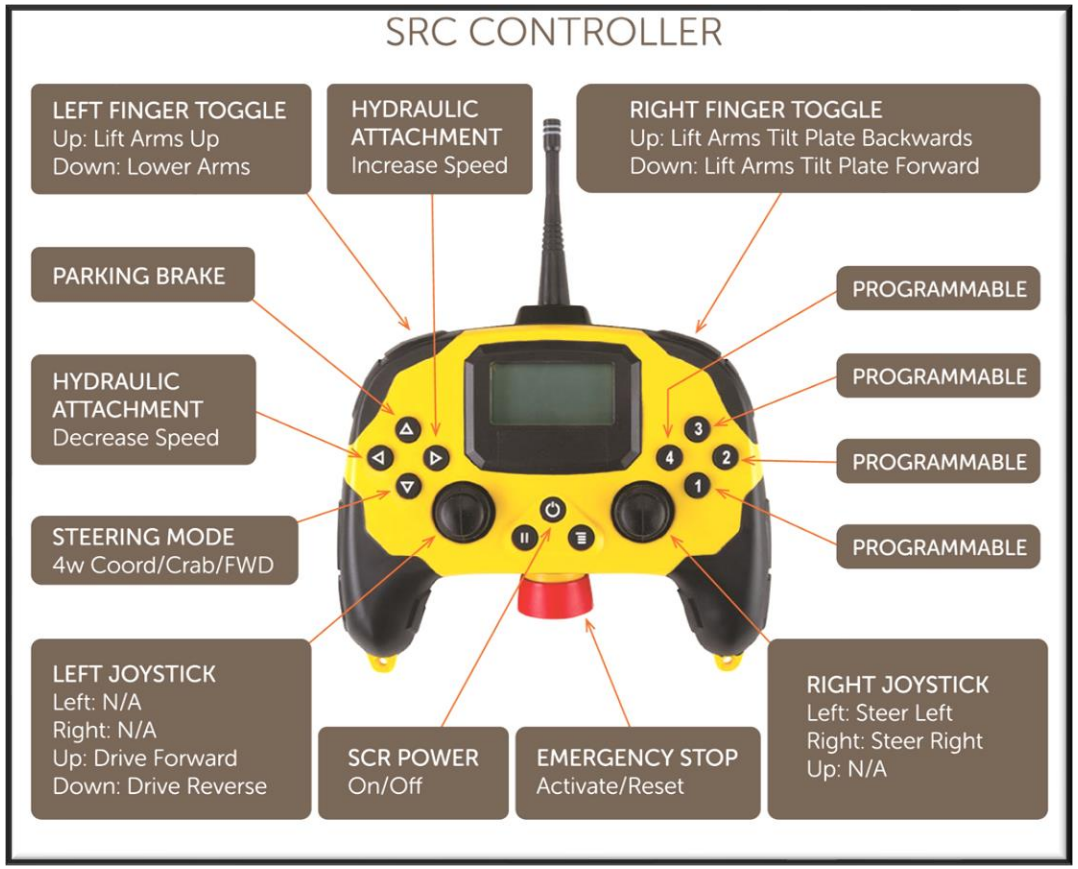
FLEXIBILITY: 120v/240v, add 480 3-P, DC Fast Charger

MICROGRID: effective DER with Renewables

Hydrogen Fuel Cell: upfit for Range Extension

RESILIENCY: Storm/Fire/Emergency

Xbox Style Remote Control



One-mile range, military encryption remote

Operator climate-controlled cab, operator platform or fully remote for distance safety

Semi & Fully Autonomous

Propriety Tech Platform

MPS MOBILE POWER STATION
DANNAR SAFEMAN

batteries — hydraulics — propel motor

- Up to 500 kWh of useable electric power on each MPS
- Tether multiple MPS units together
- Operates in up to 4 feet of water
- Speed governed at 18 mph (25 mph maximum)
- Low Maintenance & Automatic upgrades
- Operate by military-grade remote, climate-controlled cab, autonomous features

Summary Benefits of the MPS 500kWh:

- **Zero Emissions Machine – No Exhaust, No Diesel Gas Cost/No Diesel Motor Repair**
  - **MPS takes average 10 hours/Year for repair!**
  - **Heavy Duty Build – Designed with Military Specifications!**

- **Up to 500kWh On Board for Export – For Aux Power at the facility, or for Grid Outages or Fire/Emergency Event**
  - **110/220 On-Board – Optional 480/3Phase (Bi-Directional)**
  - **Output in 480 3Phase and Charge the MPS in 480 3Phase - no need for EV Charger**

  Level II EV Charger On-Board Standard
  - **Charge all your EVs in the Field no matter where your Charger is located!**
  - **Optional Additional Level II and Level III DC Fast Chargers Can be Added**

- **Quieter and Cleaner Operation for Workers – Zero Emissions Compliance for Workforce and Community**
- **Direct Platform for Autonomous Operation – All Electric MPS Machine Allow Integrated Autonomous Operation**

Robert Blumenfeld
CA Sales Manager
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2200 E Bunch Blvd, Muncie, IN
San Clemente, CA

Available on GSA/CMAS
Manufactured in USA

DANNAR®
POWER TO TRANSFORM

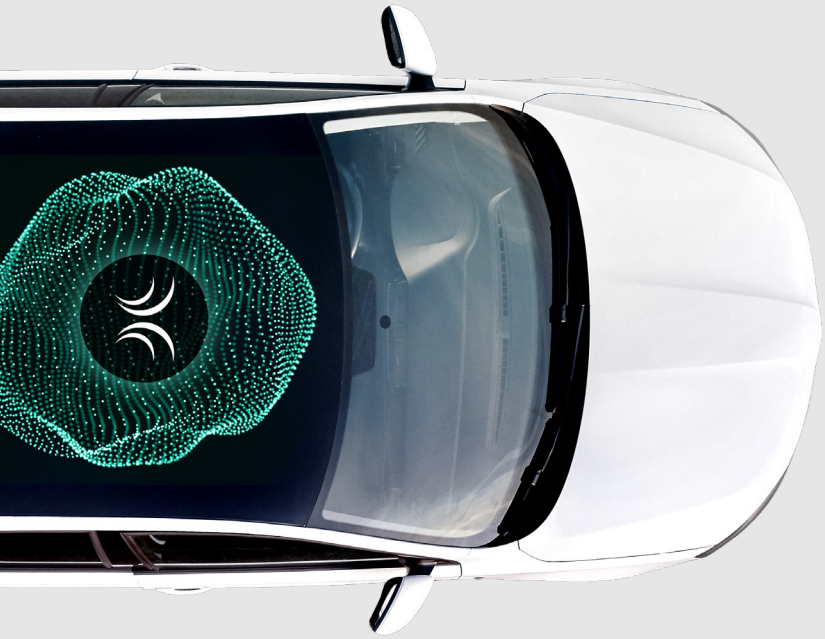
250kWh

375kWh

500kWh

WiTricity Halo™

Wireless Charging for Electric Vehicles



WiTricity®

WiTricity Halo

Just Park. And Charge.™

Wireless EV charging with WiTricity Halo is fast, easy, and hands-free. It's the modern way to charge, making EV ownership better.

Engineered for global compatibility with industry standards

WiTricity Halo is compliant with global industry standards – SAE, ISO, IEC, and GB Standards – as recognized by the world's car manufacturers and Tier 1 Suppliers. We are the global leader in wireless charging IP.

Interoperable with any standards-compliant vehicle receiver

WiTricity Halo charging system undergoes rigorous testing to ensure that it is operable with standards-compliant vehicle receivers from any licensed Tier 1 supplier.

Built with industrial-grade components to withstand the most punishing treatment

No matter the weather or how many times the charging pad is driven over, the WiTricity Halo charging system is built to stay reliable and resilient.

Wireless charging provides comparable efficiency to the plug

Our 11kW charger provides comparable efficiency to level 2 plug-in chargers, without the hassle of cords or cable. And EV drivers don't have to remember to plug in to charge.

Easy to use

EV drivers will find the simplicity of just park and charge liberating. WiTricity's unique Position Detection Feature guides drivers over the charging pad to ensure optimal charging.

Easy to professionally install

Similar to a standard Level 2 plug-in charger, the WiTricity wall charger and charging pad are easily installed by a trained professional.

Cost-Effective implementation

WiTricity Halo wireless charging system is mass market deployable. It is achieving cost points that are meeting mass market expectations so it can be installed on all mainstream vehicles and be deployed to EV customers. All OEMs that announced mass-production vehicles with a wireless charging feature have done so based on WiTricity technology.

Interoperability

Designed as a global solution for EVs of all sizes, WiTricity Halo charging works with low-slung sports cars, sedans, and high-clearance vehicles that are equipped with standards-compliant vehicle assemblies. WiTricity Halo is SOP ready with a deployed third-generation design, and is built to the demanding automotive standards that car manufacturers expect.

Safety

WiTricity Halo wireless charging is built for safety. Our patented Foreign Object Detection and Live Object Detection technology is unique in the industry. When an object is detected on the WiTricity charging pad (whether living or inanimate), the system automatically shuts off power to ensure there is no possibility of harm or injury.

Cloud Connectivity

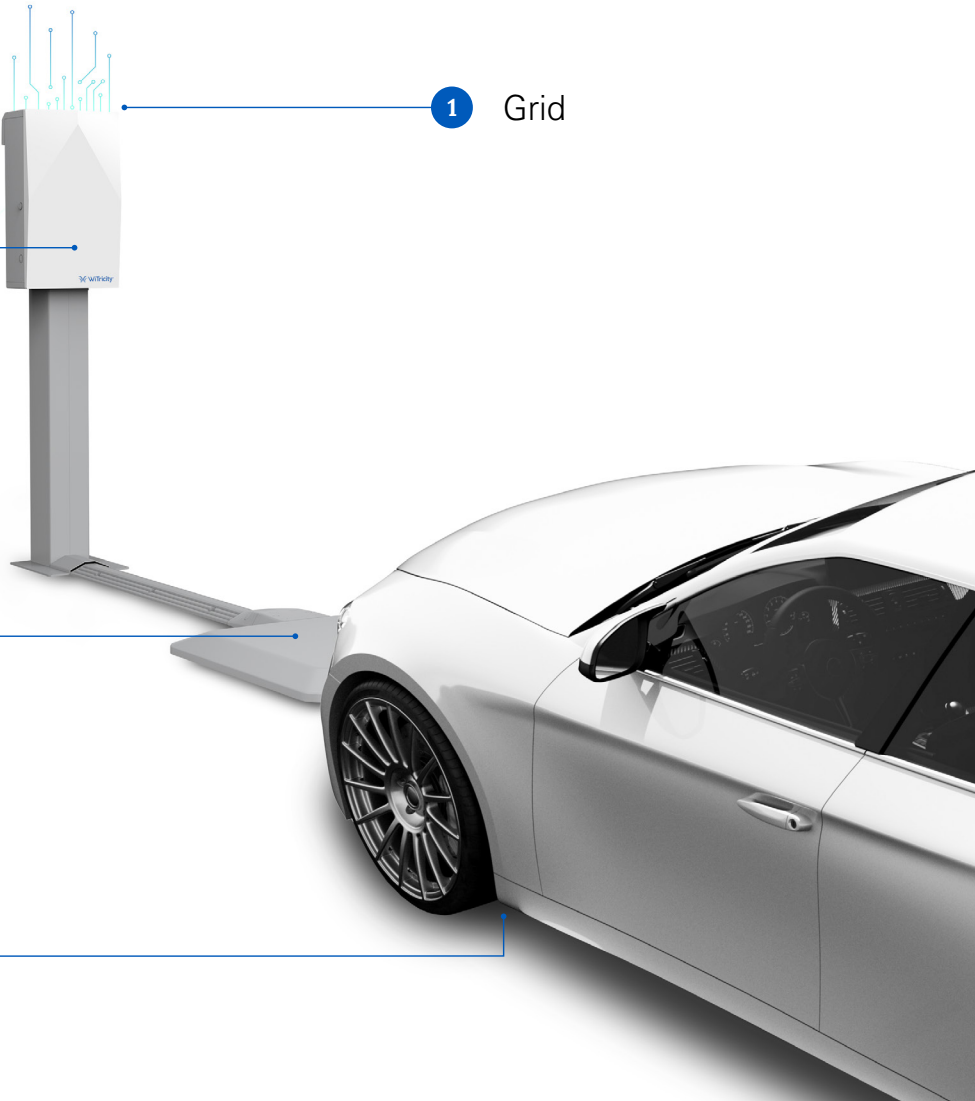
With a standards-based interface and OCPP that secures cloud connectivity, WiTricity Halo is cloud-ready for every system. As easy as any app on your cellphone or tablet, WiTricity Halo connects Over-the-Air (OTA) to provide at-your-fingertip information on charging performance, completion, and updates.

Innovation

As the pioneer and leader in wireless charging, WiTricity continues to innovate. Advanced technologies such as higher power, Vehicle to Grid (V2G) bi-directional charging, and semi dynamic/dynamic charging are just a few of the places where we are focused. All of this is backed by global companies like Toyota, Mitsubishi, Foxconn, Intel Capital, Delta Electronics, Schlumberger, Siemens, and many others. They provide continued confidence and support as we expand our strategic partners, streamline our products, and make wireless charging affordable and accessible to all.

WiTricity Halo

SYSTEM ARCHITECTURE



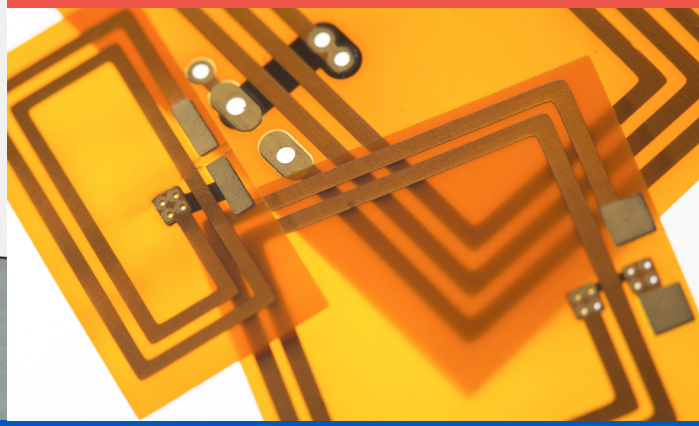
Wall Box

Power Electronics
System Controller
Wi-Fi Comms
Cloud Comms
Human Interface

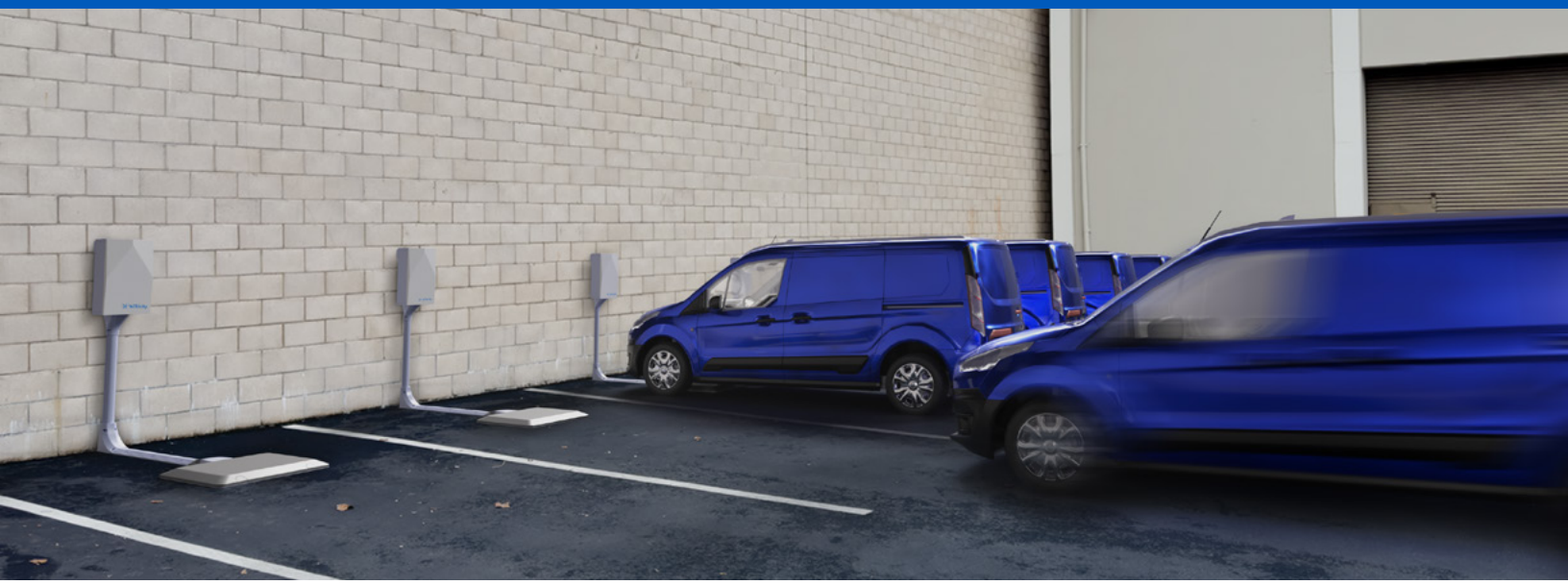
Ground Pad

Power Resonator
Position Detection
Foreign Object Detection
Live Object Detection

Receiver



WiTricity is the trailblazer in wireless charging for electric vehicles, leading the development and implementation of magnetic resonance technology across passenger and commercial vehicles alike. The company's technology is backed by an extensive patent portfolio and is the foundation for ratified global EV wireless charging standards including SAE, ISO and GB. Automakers and Tier 1 suppliers turn to WiTricity to help accelerate the adoption of EVs by eliminating the hassle of plug-in charging, setting the stage for future autonomy.



Lower the TCO for Electric Fleets with Wireless Charging

Fleets are going electric. Not only to "green" their fleet but to also lower their total cost of ownership and increase uptime. As part of a fleet's EV consideration, one of the biggest concerns is charging. How do you maximize charging opportunities without sacrificing operational efficiency?

With wireless charging, operators don't have to think about charge management. When the fleet is parked, it is charging. There's no need to worry about whether a vehicle is plugged in after a shift or before since charging starts as soon as a vehicle is parked over the charging pad and stops when it's fully charged. One less thing to worry about.

And with wireless charging, a fleet's vehicles are always connected to the grid. This enables vehicle-to-grid operability, providing additional financial incentives from your local utility.

> "Wireless charging is perfect for a fleet – safe, efficient, and cost effective."
>
> – Fleet Manager, Municipal Fleet

Ensure your drivers' safety while enhancing your fleet's efficiency with wireless charging

Vehicle miles traveled, vehicle purchase price, and electric utility charges are the main factors in the lifetime cost of an EV fleet vehicle. Of those three, electric utility charges could be cut in half with wireless charging.

Add range while extending vehicle battery life

Because charging is as simple as parking, add energy throughout your vehicles' operation naturally by extending range through power snacking™. Also, keeping vehicles at a higher state of charge has been shown to significantly increase the battery operational life.

Wireless charging helps address these concerns. And more.

- **High Peak Loads and Utility Demands**
  Commercial fleets can achieve a lower total cost of ownership with wireless charging. From reducing peak load and associated utility company demand charges with vehicle-to-grid (V2G) and reduced maintenance, fleets can maximize driver and vehicle uptime through more efficient wireless charging.
- **Workplace Injuries**
  Trips, slips, falls, and repetitive motion shoulder and back damage are the most common workplace injuries associated with conductive charging. With large, heavy charger cords at your employees' feet, accidents are waiting to happen. Safer working conditions are realized by eliminating trip hazards and the need to wrangle unwieldy cords and cables. With employees continually plugging and unplugging chargers, severe shoulder and back strain can occur. And employees are happier not having to remember to plug in.
- **Stand-Alone Charging**
  Charging doesn't have to be a stand-alone operation. Wireless charging can go places that cords and cables can't, so charging can be done at the same time as other tasks: loading, unloading, and cleaning, for example.
- **Charger Maintenance, Repair & Replacement**
  A major driver of fleet expenses is charger maintenance, repair, and replacement due to improper plug management and constant wear and tear on the plug and receiver. From continual contact in and out of the vehicle to simply running over or dropping a cord, repair and replacement are drains on a fleet's budget. Also, because of the high failure rate of charger parts, either a large cost is associated with keeping inventory or you can have a charger down for weeks while waiting for replacement parts and repairs.

WiTricity Halo™ Wireless Charging System

WALL BOX

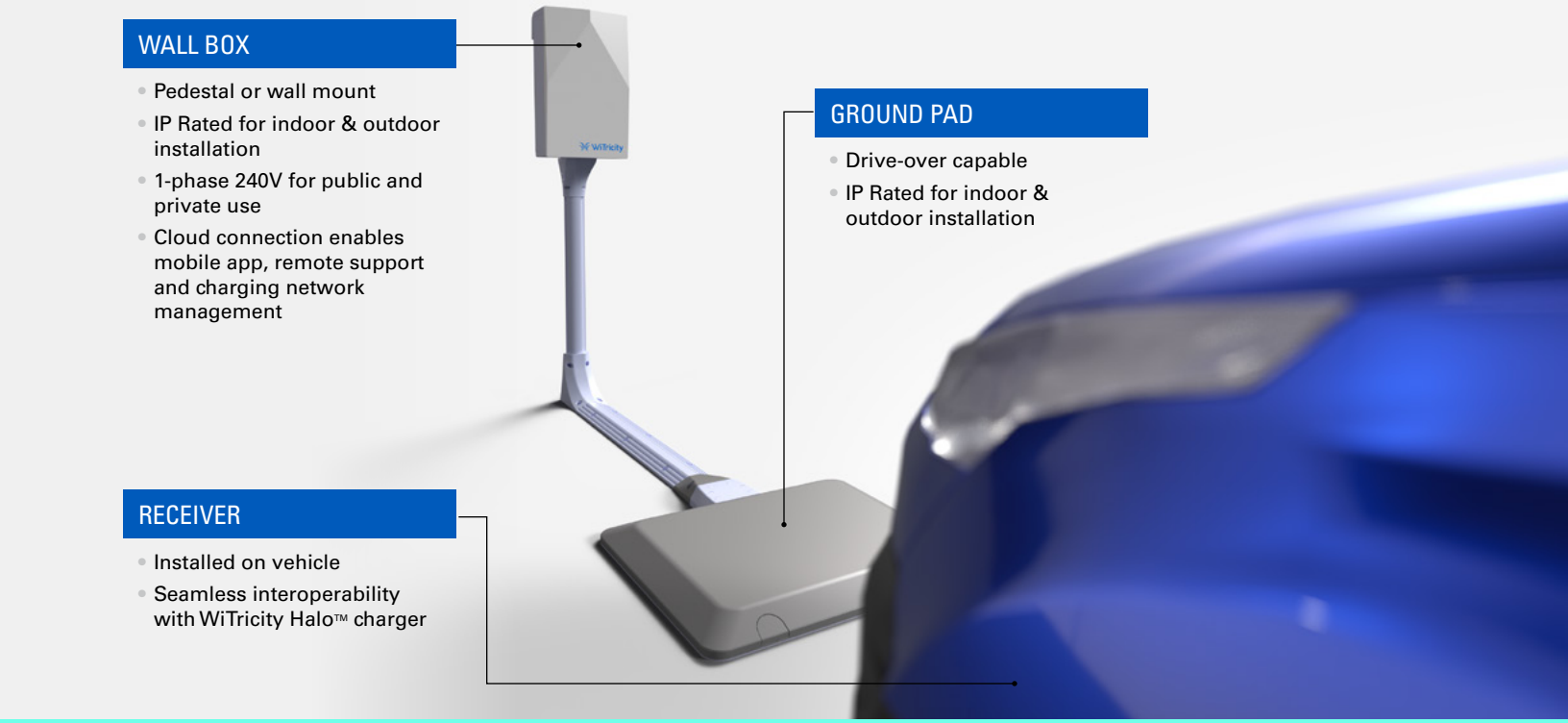
- Pedestal or wall mount
- IP Rated for indoor & outdoor installation
- 1-phase 240V for public and private use
- Cloud connection enables mobile app, remote support and charging network management

GROUND PAD

- Drive-over capable
- IP Rated for indoor & outdoor installation

RECEIVER

- Installed on vehicle
- Seamless interoperability with WiTricity Halo™ charger



WiTricity is the pioneer in wireless charging for electric vehicles, leading the development and implementation of magnetic resonance technology across passenger and commercial vehicles alike. The company's products are backed by an extensive patent portfolio critical to ratified global EV wireless charging standards including SAE, ISO, and GB. Automakers and Tier 1 suppliers rely on WiTricity to help accelerate the adoption of EVs by eliminating the hassle of plug-in charging and setting the stage for future autonomy. Beyond EVs, WiTricity technology is indispensable to the wireless charging of all products, from consumer electronics to micro-mobility to robotics.

WiTricity Halo™

Home Charger 11kW Specifications

		PARAMETER	DESCRIPTION
System Specifications (Requires SAE J2954 compliant VA)	Performance	Efficiency at nominal operating points	≥91%
		Input power rating	≤11kW
		Rated operating frequency	85kHz or 85.5kHz
		Ground Clearance	100mm- 250mm
		X range (Full Power)	-75mm to +75mm
		Y range (Full Power)	-100mm to +100mm
	Environmental	GA Ambient Temperature Range	-40°C to 55°C
	Functional Safety	Global Standards	ISO 26262 / UL2750 / IP
	Human Safety	ICNIRP Standard	Meets ICNIRP 2010 and Medical Device field exposure limits
Safety Features	Foreign Object Detection (FOD)	Detection Goal	Detect foreign objects and shut down power transfer to prevent heating of metal objects to dangerous levels.
		Detection Range	Small metal objects, such as a 29mm paper clip, can be detected ON the surface of the ground pad.
	Living Object Detection (LOD)	Detection Goal	Stop power transfer if human intrusion is detected into region around the ground pad where ICNIRP 2010 basic restrictions may be exceeded.
		Detection Mechanism	Capacitive sensing
User Experience Features	Position Detection (PD)	PD Goal	Provide parking assistance to the driver, via the vehicle IVI display, for maximum charging efficiency
		Range (Z-2 ground clearance)	X = +/- 330mm, Y = +/- 240mm
		Positioning Accuracy	Average: +/- 10mm in X and Y directions Maximum: +/-30mm in X and Y directions
		Data Available	VA Position relative to center (0,0) of GA (mm)
			"Good to charge" or "Not good to charge"
	User & Cloud Connectivity	Connectivity Options	WiTricity Cloud / OEM Cloud / Charge Point Operator Cloud
		Interface Protocol	OCPP 2.0.1
		Physical Layer Options	WiFi / Ethernet / LTE (optional)
		System Software Updates	Over The Air
		WiTricity Cloud Functions	Onboarding, Analytics, Diagnostics, Telemetry, Reporting, Systems Management
		User Interface	WiTricity App / OEM App / CPO App
	Regulatory Compliance	EMC/EMI	FCC Part 18 CISPR 11 (EN 55011) / IEC 61980-1 FCC Part 15C for WiFi
		Human EMF exposure	1. Meets ICNIRP 2010 reference levels in and around the vehicle 2. Meets ICNIRP 2010 basic restriction levels under the vehicle 3. Meets AIMD (medical devices) limit in/around/under the vehicle
	Interoperability	Global Standards	SAE J2954/ISO-IEC/GB
Communication and Control	System Communication	Between VA and GA	WiFi 802.11bgn WiFi Protocol: SAE J2847/6 (2020) ISO 15118-20 (post release)
		Power Control	Compliant with SAE J2954/ISO/GB

Specifications are subject to change.

WiTricity Halo™

Home Charger 11kW Charging Pad Specifications

COMPONENT		PARAMETER	VALUE
Charging Pad and Wall Box			
Charging Pad	Operating Range	Operating Ambient Temperature (Full Power)	-40°C to 55°C
		Elevation (Full Power)	< 2000m
	Main Features	Service Life	10 years
		Size	710mm x 840mm x 61mm
		Weight	< 46kg
		IP Rating	IP68
		Installation	Above ground
		Multiple Objects Detection System	FOD, LOD, PD signal processing and control
	Safety Protection	Drive Over threshold	Meets or exceeds UL2750
Wall Box	Main Features	Size	380mm x 590mm x 158mm
		Weight	< 25kg
		IP Rating	IP54
		Installation	Wall-hanging or Pedestal Mount

			1-phase configuration	3-phase configuration
Wall Box Internals (Power PCB: PFC, buck converter, inverter stages)	Performance Characteristics	Rated input voltage	240VAC	380VAC
		Input voltage range	180- 265VAC	380 * (1±15%) VAC
		Input frequency	50/60 Hz	50/60 Hz
		Rated input current	48A	16A (per line)
		Input power	≤11kW	≤11kW
		Power factor	≥0.99@full load; ≥0.97@half load	≥0.99@full load; ≥0.97@half load
	PFC Safety Protection	Input over-voltage protection	275VAC	456VAC
		Input under-voltage protection	170VAC	304VAC
		Input over-current protection	55A	23A (per line)
		Input over-frequency	64Hz	65Hz
		Input under-frequency	46Hz	45Hz
	Inverter Safety Protection	Input over-voltage protection	880VDC	880VDC
		Input over-current protection	38A	38A
		Output over-current protection	60A (s/w), 70A (h/w)	60A (s/w), 70A (h/w)
Wall Box Internals (System Controller PCB)	Communications	Wifi module	802.11bgn; ISO 15118-20/6	802.11bgn; ISO 15118-20/6
		Communication btw NXP and Wifi module	SDIO	SDIO
		Communication between Wall Box and Cloud	Physical layer: WiFi, Ethernet, LTE OCPP 2.0.1 compliant	Physical layer: WiFi, Ethernet, LTE OCPP 2.0.1 compliant

Specifications are subject to change.