



# **WiTricity MR/1™ Wireless Charging System**

# Introduction

The WiTricity MR/1™ Wireless Charging System increases customer satisfaction and brand loyalty by charging golf cars and Neighborhood Electric Vehicles effortlessly. Whether used in communities, golf clubs, hotels, hospitality, tourism, amusement parks, colleges, universities, or airports, the WiTricity MR/1 Wireless Charging System eliminates the hassle of winding or unwinding cables, plugging or un-plugging the vehicle, or dealing with failed connections. Best of all, it will eliminate charge anxiety – the fear of forgetting to charge the vehicle (or worrying that someone else will). Simply park the vehicle over the Power Hub and charging will start automatically.

The WiTricity MR/1 Wireless Charging System consists of two components. The **Power Hub** is installed on the ground and connects to a standard electrical wall outlet. The **Receiver** is installed on the vehicle, either from the factory or at your dealership.

## Features

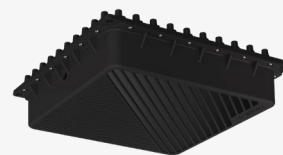
- One-time DIY installation of the Power Hub to a standard 120 VAC electrical outlet.
- Indoor or outdoor Power Hub installation.
- Wheel guide assures ease of parking over the Power Hub.
- Charging works even if the vehicle or the Power Hub is muddy or wet.
- Maintains conductive charging option when away from home.
- A Power Hub is not fixed to a single Receiver; different vehicles can charge from the same Power Hub.
- Wide input voltage range (90–264 VAC, nominal 120 VAC) allows use in a variety of power supply conditions.
- Wide operating temperature range enables use in most environmental conditions.
- Supports wide range of battery technologies and voltages.
- Waterproof and safe from environmental conditions.
- Compliant with applicable safety standards and FCC regulations.

## The WiTricity MR/1 Power Hub



The Power Hub plugs into a standard wall outlet on a dedicated 15A breaker. Remains in standby mode until a vehicle enabled for wireless charging is parked above it.

## The WiTricity MR/1 Receiver



The Receiver is installed under the vehicle by the vehicle OEM or dealer. It has connections to the battery system and will charge the battery wirelessly when the vehicle is parked above the Power Hub.

## Accessories

**Wheel guide, alignment strip, risers, activity sensor:** A wheel guide and alignment strip ensures the driver parks the vehicle in a good position for wireless charging. The risers are used to increase the height of the Power Hub when using a vehicle that is lifted. The activity sensor is used to confirm system operation.

# WiTricity MR/1™ System

## Specifications

	PARAMETER	DESCRIPTION	COMMENTS
Performance	Output Power to Battery (W)	900	
	WPT Operating Frequency (kHz)	85	
	Ground Clearance Range (mm)	150- 200	Bottom of the Power Hub to the bottom of the Receiver
	Side-to-Side Parking Range (mm)	-50 to +50	
	Front-to-Back Parking Range (mm)	-50 to +50	
Operating Range	Ambient Temperature (°C)	-20 to +40	Power delivered will de-rate at higher ambient temperatures
Regulatory Compliance	EMC/EMI	FCC Part 18 for System FCC Part 15c for 2.4 GHz radio	
	RF Exposure	Meets FCC part 2j & IEEE C95.1-2019	
System Communication	Between Receiver and Power Hub	WiTricity Proprietary Protocol	

Specifications are subject to change.

# WiTricity MR/1™ Power Hub

## Specifications

	PARAMETER	VALUE	COMMENTS
Operating Range	Ambient Temperature (°C)	-20 to +40	Power output will derate at high ambient temperatures
	Maximum Relative Humidity (%)	95	
	Maximum Operating Elevation (m)	2,000	
Main Features	Dimensions (mm)	580 x 555 x 90	
	Weight (lbs)	49	
	Power Cable Length (m)	4.5	GFCI protection is included and is UL safety compliant
	Installation	On ground, concrete or asphalt	Option to anchor to the ground
Electrical Characteristics	IP Rating	IP65	
	Nominal Input Voltage (VAC)	120	
	Input Voltage Range (VAC)	90 - 264	Power output will derate at low input voltages
	Input Frequency (Hz)	50/60	
	Maximum Input Current (A)	12	15A breaker or higher
Drive Over Weight Limit	Drive Over Weight Limit (lbs)	1000	
Input Power Protection	Safety Standards	UL62368-1, GFI	
Communications	Charger to Receiver Comms	WiTricity Proprietary Protocol	

Specifications are subject to change.

# WiTricity MR/1™ Receiver

## Specifications

	PARAMETER	VALUE	COMMENTS
Operating Range	Ambient Temperature (°C)	-20 to +40	Power output will derate at high ambient temperatures
	Maximum Relative Humidity (%)	95	
	Maximum Operating Elevation (m)	2,000	
Main Features	Service Life (years)	10	
	Dimensions (mm)	301 X 305 X 92	
	Weight (lbs)	13	
	IP Rating	IP69K	
Electrical Characteristics	Output Voltage Range - Full Power (V)	36 - 90	Selectable by Firmware Preset
	Maximum Output Current (A)	20	Continuous
Communications	Charger to Receiver Comms	WiTricity Proprietary Protocol	

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