

WiPow[®] for Mobile Machines & Robotic Devices

Add reliable, high-efficiency wireless charging to your machines and robots.

Mobile machines and robotic devices need a simple and reliable method to get powered up. A method to transfer power without the need for accurate alignment or fussy docking systems that fail due to alignment problems, dirty contacts, or mechanical failures. And in some cases, a method that can be totally sealed, allowing power transfer in high moisture and underwater application scenarios.

If you're designing a device where a power cord gets in the way, manual plugging and unplugging is a problem, or the environment just can't tolerate electromechanical connections, wireless WiPow charging is the solution.

Pull the plug. Cord-free charging is here.

WiPow power transfer technology provides a fully-integrated, wireless power system for electronic devices that is efficient, reliable and safe to use. The technology employs electromagnetic coupling, also known as induction coupling techniques.

WiPow is a technology solution you can trust. It's a power source that doesn't require a complicated docking system with failure-prone mechanical connections. It provides over 300 watts of power that can be transferred to even hermetically-sealed devices. Special efforts were made to ensure the system is regulatory compliant, user friendly, and cost effective to implement.

WiPow power transfer technology is designed for strict regulatory and safety requirements.

Electrical safety, isolation and electromagnetic energy limitations were key elements of the WiPow design process. Meeting UL 2738, IEC 61010-1, and IEC 60601-1 were addressed in the initial technology development. And, the frequencies chosen for WiPow charging were selected so that RF emissions are not a problem, and will easily meet FCC restrictions.

WiPow's patent-pending methods give you the ability to address power charging issues in these and many more applications and environments...

- Robotics
- Unmanned aerial vehicles and delivery drones
- Heavy mechanical use
- Hostile, under water and high moisture environments
- Internal motion machines

WiPow includes:

- **Efficient power transfer**
- **Easy placement for charging**
- **No fussy alignment issues**
- **Eliminates mechanical connections**
- **Eliminates power cords**
- **Continuously monitors & controls charging and battery status**
- **Regulatory compliance for emissions & safety**

There are several ways to charge devices using WiPow technology: The Power Pad© and Power Port© meet the needs of most devices. Applications environment and human-interaction factors in device use determine the appropriateness of each system.

Power Pad for On-the-Floor charging.

In commercial or consumer settings where staging areas or fixed locations are appropriate for devices, the Power Pad is an easy and simple charging solution. The user simply rolls the device on top of the Power Pad to charge. When the device is on the Power Pad the battery will fully charge. When the device is rolled away from the Power Pad, the charging light shuts off, and a battery status indicator light turns on. Users then know the battery status while they easily move the device to where it needs to be used.

Best of all, perfect alignment isn't critical to use WiPow technology. The Power Pad will successfully charge at full rate when off-center by as much as 4 inches (20 cm). So it's perfect for devices that can't do exact alignment positioning.

Power Pad devices can be done for interior or exterior applications where your machine comes back for power on a periodic basis, with no need for human intervention or manual cord plugging.

Power Port for On-the-Wall charging.

For environments that won't allow for anything to be placed on the floor, the Power Port charging method is available. Like the Power Pad, no power cord is required to charge the battery. The only difference is that instead of the charging device being on the floor, the Power Port is mounted to a wall. The device is placed next to the Power Port and the WiPow system does the rest.

Power transfer by other methods.

For special situations, where wires are not a good solution, WiPow will help you find the best solution. Contact us to discuss your needs and power connection issues.

Let us show you how easy it is to fit a cost-effective version of WiPow into your device.