

Transcript: Show 22 February 13, 2012

Up next on ATETV, the power of wireless electricity.

In our world full of mobile devices, the demand for batteries and chargers is increasing, but what if all those devices could be powered wirelessly. We visit a company that is pushing the boundaries of wireless electricity and maybe on the verge of truly changing our world.

How you doing?

Good, long time.

How you doing?

Good.

So, I'm going to blow your mind here. WiTricity and highly coupled magnetic resonants is a power independent phenomenon. There's a coil that's plugged in to the back of the computer that picks up a magnetic field from behind the wall.

Yeah, there is a coil back there.

And here's a 60 watt computer, working without a battery.

Wow.

Here's a cellphone, we've got a coil and electronics going into the battery charging circuit.

Okay.

And watch what happens when we get him about 3 feet away from the wall.

So, you're running this off the same coil right now, the phone just started up.

Exactly.

WiTricity is providing the technology to make the last thing in the world go wireless, power. We're safe unlike lightning. Efficient unlike radio frequencies and work over distance unlike magnetic conduction.

This is a resonator, if it looks like wood and wire mold from Home Depot that's because it is actually, and coil is just imbedded inside.



Yeah.

And we took the resonator and put in on the back of the television.

No wires? I can't believe there's nothing attached to this TV.

And at some point here, the TV should come on.

It's a very hands on organization. We buy 2 of everything that we like to turn into wireless power. We break the first one, meaning we take it part, and then the second one, we put WiTricity inside of it so we enable it.

We took carpet tiles and we placed a coil underneath each one of them. So, if I turn that pad on, every light in this room, just turned on, and the cellphone is charging.

Wow.

No electrical wires.

Running the whole room.

WiTricity's goal is to build a broad based business in wireless power transfer. We'll get thousands, tens of thousands of people working with the technology, developing different applications for it, and that's our goal to see it to get proliferated as much as possible.

There never are enough engineers to work on those things, so if you're a student today, jump on in and study something technical.

I've never been in smart car.

And it's a WiTricity smart car too. So, it's a smart car, all electric with WiTricity.

So, it's very smart.

So, it's very smart. Let's take it for a spin.

Okay. Oh, there's a lot of room in here.

Yes, it's surprising. Part of the technology is everything is modeled in the computer first.

At WiTricity, we have a wide spectrum from people who were just out of school. To people that have a lot of experience, and we tend to look for the same qualities, flexibility mentally. The ability to not say no. Not say something is impossible.



So, how do we know we're charging?

Once we've pulled over the pad. The system will sense that, and we just look to the gages up there and shows a positive charge going on. We get to work on, some of the most incredibly interesting technology that is one of the biggest breakthroughs in science since Michael Faraday came up with magnetic conduction in 1831, 180 years ago.

So, its fun to work in something where you can change the world.

I can see the resonator under there. Alright, so you have one on the floor, you have one underneath, and that what's providing the actual charging.

Imagine that there are devices and things you could do that you haven't even thought of yet. So, there probably wonderful things to come in the future, that are just in someone's imagination waiting to pop out.

For more information on anything you seen today, explore our website at ATETV.org. Thanks for watching.