WattZilla's Black Mamba and Wall Wattz receive UL safety certification as the company launches a new EVSE trade-in program

By Michael Alba



Black Mamba

The last time *Charged* spoke with WattZilla's Frank Gangi, he teased the company's Black Mamba as "a lightweight EV charging cord that looks like a snake that ate a rat." Don't be put off by the namesake - as Gangi tells it, the Black Mamba is a carefully designed, lightweight charger that packs a punch.

"To get all the stuff in that little beer can there, we think we will have about five patents that will come out of that enclosure," says Gangi about the Black Mamba's protruding midsection. "And that's actually a six-foot cord on the power side and a 25-foot cord on the output

A LIGHTWEIGHT EV CHARGING CORD THAT LOOKS LIKE A **SNAKE THAT ATE A RAT**

side. So it gives you a little more than 31 feet, end to end."

On one end of the Black Mamba is the wall plug (offered as a NEMA 14-50 or 14-60 for 40 A or 48 A continuous rated output). The "beer can" tube is a





custom-made enclosure with an inner polycarbonate layer surrounded by aluminum. It's built to be durable, with a standard T6061 black anodized aluminum can that adheres to National Electrical Manufacturers Association (NEMA) Type 4X standards. WattZilla says you can drive over it with a truck, and it's designed to withstand a two-thousand-pound test. On the other end is a J1772 coupler.

For customers with even stronger requirements, WattZilla is up to the task. "We have one customer, a mining company up in Canada, who was worried about wildlife," says Gangi. "So we manufactured the product for them using 316 stainless [a marine grade alloy]."

Like all of WattZilla's products, Black Mamba is designed to be the last charger you'll need to buy - both in terms of durability and power rating. "As far as I can

tell, we're the only 48 A in this power cord form factor in the market," said Gangi. Even Tesla owners might want to pay attention: "Not even Tesla provides a 48 A portable charger. The maximum they provide is 40, but the car will take 48. We provide that through the Black Mamba 48 A model."

WattZilla also thinks the Black Mamba will be helpful in a lot of commercial settings, like car dealerships. "Rather than putting in one bay that has a charger, they can just bolt the Mounting Bracket to a tool box or shop cart and take the charger wherever they need it. So they don't have to designate a specific EV bay - any bay can be an EV bay."

Wall Wattz

The Wall Wattz is WattZilla's newest wall-mounted





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charger, available in 40, 48, or 75 amp models. With a small form factor, LED display, and stainless-steel enclosure, the Wall Wattz is an attractive EVSE option. But Gangi likes to think of WattZilla's products as industrial art, rather than just pieces of equipment - hence, the Wall Wattz Artist Series.

"You don't have to take our basic stainless steel," says Gangi. "You can say, 'You know what, my car is red, give me a red charger.' Or, 'My car is blue, give me a blue one.' Or, 'You know what, I want a skull.' We've got this Artist Series which is a bespoke kind of service, where you can select what you want your charger to look like."

Want your charging station to be a homage to Iron Man? No problem. How about Boba Fett? You got it. WattZilla offers a number of designs to choose from, but if their selection leaves you wanting more, just design one yourself: "It doesn't have to be any one of these," says Gangi of the options on WattZilla's web site. "You can send us a picture and say, 'I'd like this,' and we can do that too. You give us the artwork, we'll install it and ship it to you." With the Wall Wattz Artist Series, your EVSE can be as personal as your EV.



YOU CAN TELL US THE MAKE, MODEL, AND SERIAL NUMBER, AND WE'LL GIVE YOU A TRADE-IN VALUE TOWARDS A WATTZILLA UNO, DUO, OR QUADZILLA.

UL approval

One of biggest updates to the WattZilla lineup is the recent UL Certifications. In fact, says Gangi, WattZilla's EVSEs even have a leg up on other UL-listed products: "We're already meeting the 2019 standards with our entire product line, not just Black Mamba and Wall Wattz."

In order to meet UL standards, Gangi and the WattZilla team had to rethink some EVSE engineering. "When you go to UL to get approval for an EVSE," explains Gangi, "one of the tests you have to pass is how fast the relay opens when it's commanded open. And that's not just at room temperature, that's at 66° C [150° F] and -35° C [-31° F]. They first test the relay at 25° C thousands of times. Then they bring you up to 66° C, do the same test, then lower the temperature down to -35° C and test it there."

To pass this test, WattZilla developed a new, patentpending method of relay control. "We came up with an unheard-of process where we actually fire the relay with two different wires," says Gangi. "Rather than trying to find a single power amount that will both close the relay and allow it to open quickly, we separated those two functions. We have a patent-pending methodology for allowing the relay to close and stay closed reliably, but open very quickly."

This innovation proved very successful with UL, according to Gangi. "We've got some of the highest temperature ratings of any EVSE. Other EVSEs don't have quite the range we do, so we have an expanded range over a lot of products."

Trade-In EVSEs

In addition to the new products, WattZilla has also announced what Gangi describes as an industry first:



a trade-in program for outdated EVSE. "If you have an existing EVSE that's not working, for whatever reason, you can tell us the make, model, and serial number, and we'll give you a trade-in value towards a WattZilla UNO, DUO, or QuadZilla."

EV owners looking to upgrade their old EVSE will get up to \$1,000 in trade-in value, and will receive a brand-new unit from WattZilla, warranty included. To make the trade-in even easier, WattZilla is offering a flat ground shipping rate of 99 cents a pound anywhere in the US.

"We're very good at adapting to other peoples' EVSE footprints," adds Gangi. "We can make an adapter plate that will sit on the original nuts and bolts that are coming out of the ground. So you don't have to pull up the concrete or any of that other stuff, we just put the adapter plate down and put our unit on top of it. We make it simple and easy."

Whether you're fresh from the dealership with your first EV, or an experienced veteran looking for an EVSE upgrade, WattZilla has something for you. From the lightweight Black Mamba to the artistic Wall Wattz, it seems Gangi and the WattZilla team are as intent as ever on their goal: to create the last charging station you'll ever need.