

Gravity installs first 24 500kW EV chargers at West 42nd Street

December 12, 2023 - Owners Developers & Managers



Manhattan, NY Gravity, the pioneering electric vehicle (EV) infrastructure firm, will release a full suite of next generation 500kW EV charging equipment - the first 500kW chargers and system to ever complete UL Solutions' evaluation and testing and achieve certification.

The new 500kW chargers are no bigger than a conventional AC/Level two charger, but are 90-times faster, unlocking the fastest charging available anywhere in the country in even the tightest indoor parking garages. Gravity is installing the first 24 of its 500kW chargers at its new flagship facility on West 42nd St. Each unit is capable of providing vehicles with a 200-mile range in just five minutes of charging. The site will open to the public this fall.

UL Solutions has certified six Gravity chargers and two power cabinets, which span all installation types and conditions. UL Solutions' testing validates that Gravity's proprietary technology meets established safety and performance requirements - a certification sought after by both public and

private partners seeking EV infrastructure providers. As major property owners and garage operators seek out EV charging partners and attempt to distinguish between marketing claims and true performance, the UL Mark sets this equipment apart from much of the marketplace.

Gravity now has the capacity to manufacture and ship thousands of units per year. These charging units are the first of a new category of EV infrastructure the company calls "Distributed Energy Access Points" or DEAPsTM, which embed the EV and its battery into the electrical grid, allow for high capacity sharing and transfer of power. Gravity designs, engineers and manufactures its own line of equipment for use at its charging sites, and writes its own energy management and OCPP 2.0.1 compliant software. The systems can flexibly distribute power across dozens of DEAPs to fully charge each vehicle in its desired timeframe and interface directly with a building to smooth energy loads and to prevent new demand peaks—all without requiring costly utility infrastructure upgrades.

"DEAPs are a new generation of charger that represents a giant leap forward for the industry by promising EV charging that's less expensive and as fast as filling up a tank of gas. This equipment isn't only the first UL-certified 500kW charging system anywhere in the country, it's the fastest charging system—period. This is a massive breakthrough for urban charging that will help unlock widespread EV adoption," said Moshe Cohen, founder and CEO of Gravity Inc.

"For the EV industry, there has never been a more critical time to demonstrate commitment to safety, security and sustainability," said Milan Dotlich, vice president and general manager of the Energy and Industrial Automation Group at UL Solutions. "By earning UL certification, Gravity has taken a significant step in EV charging safety. Their bold action demonstrates their commitment to prioritizing safety, and we're pleased they're placing their trust in UL Solutions to help deliver on that promise."

Technical Specifications for Gravity's UL-Certified Gravity Equipment:

4 Chargers Rated to 500kW: Gravity's 4 500kW DEAPs are developed with mounting configurations for indoor and outdoor use, none larger than a suitcase or carry-on. Gravity's DEAPs are up to 90X faster than comparably sized equipment available today. These models are a major leap forward for fast charging in confined indoor garages common in cities like New York where the current generation of bulky DC chargers cannot be deployed.

- Liquid-to-Liquid-Cooled Dispenser: Ceiling/Wall Mount, dimensions: 39"x 9" x 18"
- Liquid-Cooled Dispenser: Ceiling/Wall Mount, dimensions: 31" x 9" x 18"
- Liquid-Cooled Dispenser: Post Mount, dimensions: 20" x 11" x 30"
- Liquid-to-Air-Cooled Dispenser: Pedestal/Wall Mount, dimensions: 20" x 11" x 53"

- 2 Chargers Rated to 200kW: Gravity has two 200kW DEAPs that can be installed either on curbside posts for on-street charging, or in indoor parking garages.
- Air-Cooled Dispenser: Ceiling/Wall Mount, dimensions: 27" x 9" x 18"
- Air-Cooled Dispenser: Post Mount, dimensions: 18" x 9" x 27"
- 2 Power Cabinets Rated to 360kW: Gravity's 6- and 12-bus power cabinets enable dynamic energy management across charging sites and even entire buildings. They are designed to distribute and manage power across multiple chargers so that each vehicle is seamlessly charged in the required timeframe, whether in minutes or hours. Gravity's cabinets can be interconnected to provide systems of tens of megawatts and redistribute power to chargers on a second-by-second basis in increments of no more than 30kW—a far more nimble system than the industry standard of directing power based on inflexible criteria like first-come-first-served, full-priority or equal-split.

The system is engineered to fully integrate with a building's existing electrical systems so that it can provide power to chargers without incurring new peaks in overall consumption, holding electrical costs down for both owners and consumers.

New York Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540