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PIVO 3 – SMART URBAN COMMUTER IS EV OF THE NEAR FUTURE



PIVO 3

It all started in 2005. Since featuring PIVO 1 at the Tokyo Motor Show, Nissan has introduced six other EV concepts, all demonstrating Nissan's dedication to creating exciting and innovative zero emission mobility solutions. And at the upcoming 42nd Tokyo Motor Show, Nissan will be revealing the PIVO 3, its eighth EV concept. Yet this is not just a show car – PIVO 3 is what Nissan envisions to be a more "realistic" EV of the near future.

PIVO 3 takes Nissan's EV portfolio another step forward. Building on the pioneering PIVO 1 and PIVO 2, the new PIVO 3 concept moves from the realm of imagination into a fully-evolved vehicle that envisions life in tomorrow's cities. Where PIVO 2 was a highly innovative vehicle that stood alone as a concept car, PIVO 3 evolves in the direction of "smart community" with greater feasibility, credibility and an extended scope of mobile performance. Nissan believes PIVO 3 is very close to what the next step in urban mobility will be.

Francois Bancon, Deputy Division General Manager of Product Strategy and Product Planning Division, explains "*PIVO is one of the answers for active urbanists living in mature markets. Through the three PIVO proposals, we have gained a deep understanding of their needs in such large, metropolitan areas. Each of the eight concepts that we have created address different needs, different communities, different lifestyles for different markets. That makes zero emission mobility an ambitious statement for the company... At Nissan, we believe that the world is changing and mobility has a role to play to make it better*".

As part of Nissan's long-term commitment to lead the way in mass-marketed zero-emission mobility, PIVO 3 stands alongside the Nissan LEAF as a practical approach to sustainability for the real world. Nissan LEAF is a compact hatchback; PIVO is an ultra-compact city commuter targeting singles and couples living in and enjoying an urban lifestyle.

Comes when it's called, with automated parking and automatic charging functions

With Automated Valet Parking (AVP), PIVO 3 will revolutionize the parking experience by connecting to and responding to infrastructure. No longer does a driver need to find a parking space, physically park the car, or remember which space the car is parked. PIVO 3 can park automatically in specially-equipped parking lots. While the driver shops or takes care of business, PIVO 3 recharges itself or sells excess power to the grid. Later, the driver can call PIVO 3 and summon it to the driver's location using a smartphone. This AVP function not only creates more freedom in private life, but it can also contribute to society and benefit the environment by supplying electric power on the regional grid. PIVO 3 points the way to mobility as a service — always on, available and reliable.

U-turn in 4 meters, with zero turn gap

PIVO 3 is a remarkably compact package, measuring just under 3m in length and seating three in a 1+2 layout. The compact body and narrow-tread wheels with IWM (in-wheel motors) enable an extremely small turning radius with zero turn gap. PIVO 3 is very agile and can effortlessly park in tight spaces. Such maneuverability also aids the driver who has taken a wrong turn onto a narrow street. Instead of having to back out in reverse gear, PIVO 3 can make a legal U-turn in a road only 4m wide. Considering that most public roads around the world are at least 4m in width, this means that a U-turn is almost always possible because of its 2m minimum turning radius.

Package leverages electric drive, by-wire technology and in-wheel motors

Like the previous PIVO 1 and PIVO 2, PIVO 3 uses electric power and by-wire control technology to permit freedom of layout and the downsizing or elimination of many mechanical parts. Again, similar to PIVO 2, PIVO 3 uses in-wheel motors (IWM) to give wheels great freedom of movement, and more space in the vehicle chassis. Moreover, PIVO 3 balances the advantages of IWM with user friendliness by keeping wheel rotation within a range that will maintain a natural steering feel for the typical driver.

Seamless mobility built on friendly innovation

Guided by the philosophy of “friendly innovation”, Nissan seeks to ensure that the customer perceives cutting-edge technology as being truly easy to use and understand. In this context, one of the engaging features of PIVO 3 that it inherits from the previous PIVO 2 is the Robotic Agent interface. The car acts as a partner or personal assistant to the driver, with companionship conveyed by the Robotic Agent. Based on this approach, PIVO 3 supports a life of seamless mobility, using cloud computing and infrastructure (e.g. AVP and charging facilities) to connect with the city. A “smart” personal filter selects information relevant to the current driver, location and vehicle.

Mature exterior styling integrates narrow-tread rear tires

Externally, PIVO 3 shows mature styling with bold surfaces and a new stance. Front fenders extending out of a crouching chassis with a sculptural front exude a look of agility. Long body lines and angular planes combine in a dynamically active form. Rear styling cues emphasize strong presence within compact dimensions. Trim and stylish mobility is promised by the new stance, which attractively reveals narrow rear track width.

Interior design

Inside, PIVO 3 presents a distinctive design centering on driving controls that seamlessly integrate with interior and exterior styling. Side-view monitors take the place of mirrors, using Nissan’s Around View Monitor system to reveal the car’s surroundings and help minimize blind spots. The center console features an ultra-wide display for GPS and other information, and together with a sub-monitor and the Robotic Agent, is positioned to interact discreetly with the driver. Carefully stitched leather and silver-hued trim meld in a “snow white” and “EV blue” color scheme to produce a tasteful, high-quality ambience. Smooth surfaces add to the refined feel within the compact cabin dimensions, rather than emphasizing environmental frugality.

Next stage of urban mobility

With its home charging capability, Nissan LEAF liberates the driver from dependence on gasoline. It also has the potential to store renewable energy and even supply the household with electricity. From this "LEAF to HOME" connection, PIVO 3 expands the possibilities to include the entire electrical grid. When EV's represent a larger percentage of all cars, collectively serving as part of a city's infrastructure, advanced electric vehicles like PIVO 3 could help balance electric power supply and demand — around the clock and around the town. Such a powerful synergy of smart cities, cloud computing and EVs opens the door to the urban society of tomorrow.

Here, once again, Nissan demonstrates its commitment as a responsible corporate citizen to zero emission mobility with an inspired vision of the way we will live and drive in the near future.

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