



Smart Power

EC-03 Zero-Emission Electric Commuter Vehicle

Aiming to create enjoyment in personal mobility, the Yamaha Motor group launched the EC-03 Electric Commuter Vehicle in the Japanese market in September 2010. In addition to a quiet, smooth ride driven by a clean electric motor that emits no exhaust, the design and compact operability distinguish the vehicle from a Class 1 scooter, making it increasingly popular in tourist areas and at resort facilities, as well as being a convenient means of transportation for short distances in urban areas. A total of 2,000 units were delivered from the September 2010 launch through December 2011.



PAS VIENTA Electrically Power Assisted Bicycle Sporty, casual bicycle mainly targeting women

As an expression of Smart Power that is based on a philosophy of placing “priority on human sensations,” the functionality and specifications of Yamaha Motor’s PAS units for electrically power assisted bicycles have developed over the years, leading to smaller and lighter units with improved battery performance. Launched in September 2011, the PAS VIENTA uses Yamaha Motor’s unique S.P.E.C.8 (Shift Position Electric Control and in-hub 8-speed gear) mechanism for a sporty, responsive ride. The stylish appearance and comfortable build has made the PAS VIENTA popular among women.

Industrial-Use Unmanned Helicopter

RMAX Type II G

Contributing to increased efficiency and labor savings in agricultural operations

Yamaha Motor released the world’s first industrial-use unmanned helicopter in 1987. These helicopters have established a solid position in pest control systems, primarily for spraying agricultural chemicals over rice paddies and soy and wheat fields, and the surface area covered by these systems continues to show rapid growth. With small engine and electronic control technologies developed in motorcycles and outboard motors as the core technologies, these helicopters can maintain a stable flight and contribute to improved efficiency and energy conservation in agricultural operations. As the agricultural workforce contracts and ages, these products are indispensable in today’s agriculture for addressing such issues as reducing the cost of agricultural products.

We have also developed the RMAX Auto-Navigating Aerial Vehicle, based on the RMAX line and equipped with an automated control system, and it has earned a solid reputation in the field of agriculture. With a programmable radius of three kilometers, these unmanned helicopters are able to collect information and conduct surveys and measurements in dangerous areas that people or manned helicopters cannot enter. The scope of aerial operations has spread in recent years to a variety of fields involving measuring, monitoring and surveying.



Industrial Machinery and Robots

Z:TA YSM40 Surface Mounter

Achieving industry's top levels of mounting speed and productivity

The industrial machinery and robot business is a source of increasing expectations for the future. Demand is being driven by mobile information devices like smartphones and tablet computers, and Yamaha Motor will be releasing the Z:TA YSM40 surface mounter, which boasts one of the industry's highest component mounting speeds, for this market.

With a 4-stage, 4-head layout and conveyors that allow for a variety of conveyance patterns, this product can mount more than 100,000 components per hour, putting it at the top end of the industry in terms of component mounting capacity. The YSM40 can also be used together with Yamaha Motor's newly developed ZS Feeder electric-powered tape feeder for continuous, nonstop production. The interchangeable heads provide a high degree of versatility, accommodating a wide range of components from super-small chips to large, odd-shaped components. We expect this product to lead to the growth of the high-speed machinery market, as such production equipment is optimally suited for the small and medium-sized boards contained in the digital electronic machinery equipment that is driving the growth of the surface mounter market.



Generators and Multipurpose Engines

EF1600iS Inverter Generator

Lightweight, compact, retro-modern design

Portable generators sold in Japan are primarily used as a commercial power source, but they received renewed attention as an emergency power source for homes and companies following the Great East Japan Earthquake and the subsequent rolling blackouts. Demand has risen for inverter generators, which provide quality electricity that can be used as a power source for personal computers and precision instruments. Following the March 2011 earthquake, Yamaha Motor provided 500 of its inverter generators to the stricken area.

The EF1600iS uses a very lightweight, small engine and resin parts for a compact design. Although providing a high output of 1.6kVA, this lightweight generator weighs only 20 kilograms. The use of an inverter system provides quality electricity at the same level as a residential power source, making it possible to use the EF1600iS with confidence to run products containing built-in microcomputers or microcomputer-controlled electric tools. In addition to complying with emission standards and running with low noise, this generator boasts 90% recyclability, indicative of Yamaha Motor's engineering, manufacturing and marketing standards.

