

Trustworthy in Task



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#### NOTES

\*Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of the machine.

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Leader in New Energy Loaders  
Pioneer in Industry Standards



INTELLIGENT



ECO-FRIENDLY

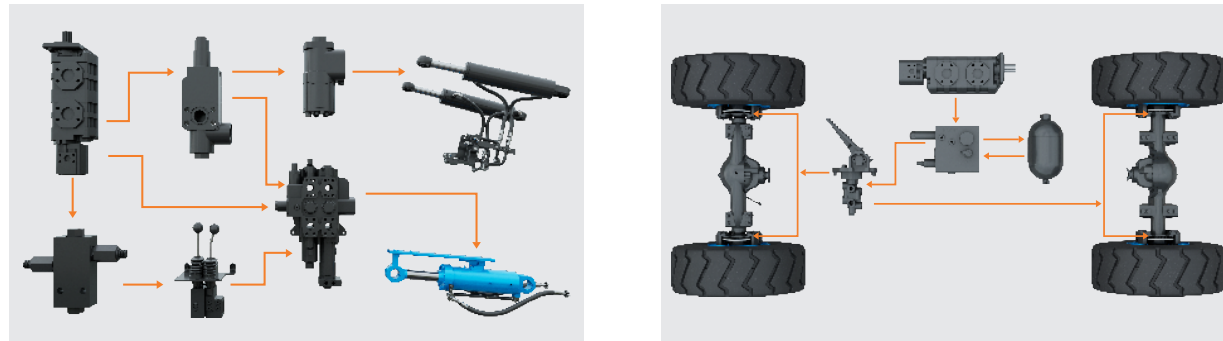


COMFORTABLE

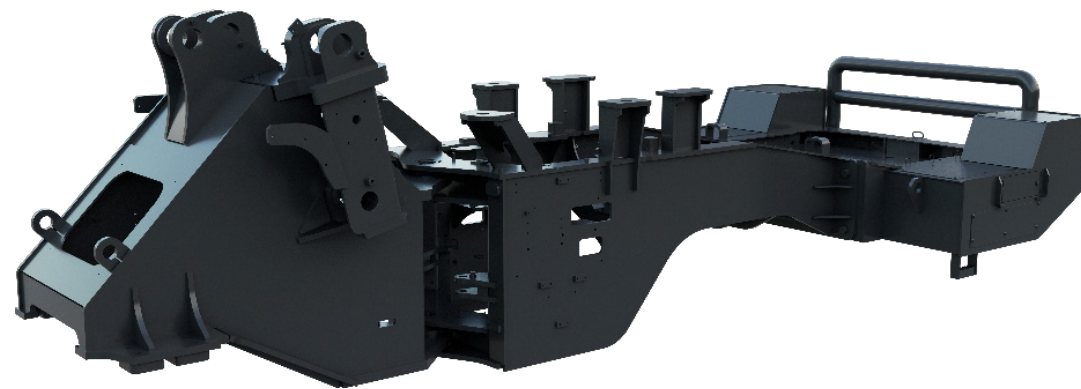
# YX656EV-GT YX660EV-GT



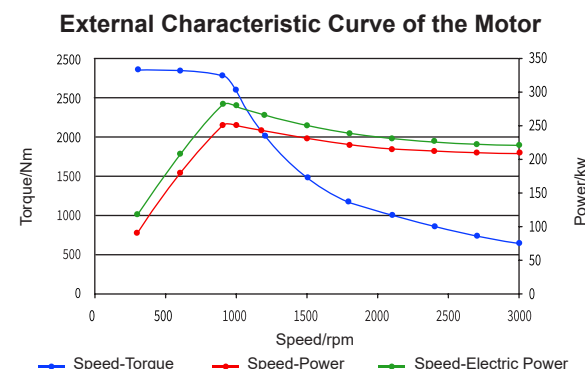
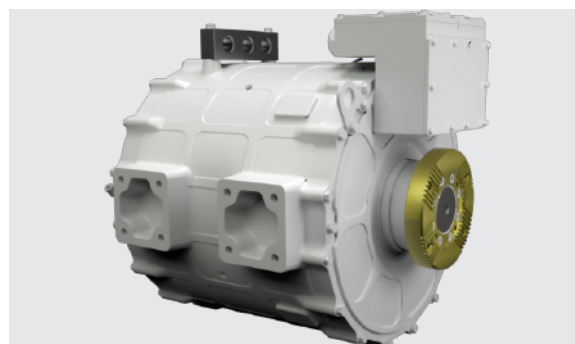
- ▶ **Hydraulic Technology:** The new generation electro-hydraulic positive flow technology enhances micro-control and response sensitivity. The hydraulic system can achieve "zero" energy loss of the drive system during operation, making it more energy-efficient and high-performing.



- ▶ **Drive System:** Driven directly by the motor with an electric shift gearbox, transmission efficiency increases by over 30%, and energy utilization efficiency more than doubles. Utilizing intelligent electric control programming, it achieves continuously variable transmission and power cutoff, maximizing overall machine efficiency.
- ▶ **Heavy-Duty Frame:** Reinforced heavy-duty frame with high load capacity, enhanced structural strength, and adapts to heavy-load conditions.



- ▶ **Drive Motor:** Equipped with a high-efficiency permanent magnet synchronous motor that powers the entire machine. Compared to traditional engines, it is more compact, lightweight, and features high power density, reliability, and precise speed control. With a rapid response time, it provides maximum power and acceleration output for the loader, ensuring ample overall machine power.



- ▶ **Reinforced Heavy-Duty Drive Axle:** The reinforced heavy-duty drive axle has a large load-bearing capacity. The axle housing cross-section is optimized and enlarged, and the reinforced main reducer and wheel reducers ensure more stable and reliable quality.

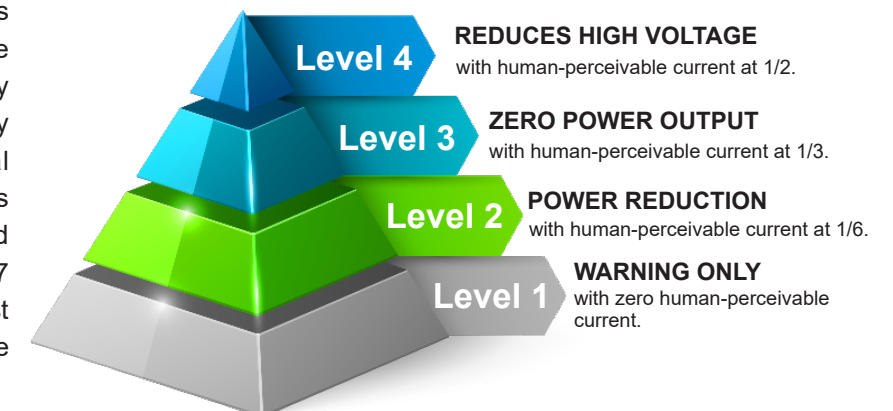


- ▶ **Battery Safety:** Battery Frame Structure Installation: The rear of the machine is equipped with an anti-collision steel beam, providing cushioning and protection to ensure the safety of the battery and electrical components in case of accidental impact. The battery cells have an extended cycle life with a warranty of five years or 10,000 hours, ensuring reliability and peace of mind in use.
- ▶ **Electronic Control System:** Integrated multi-functional controller decouples the hydraulic and drive systems, allowing for independent operation of dual motors, enhancing energy efficiency. The electronic control system is layered within the rear hood, making maintenance more convenient.



- ▶ **Four-Level Safety Alarm System:**

The high-voltage system features leakage protection, where the electronic control system immediately responds and activates safety measures upon detecting abnormal current fluctuations. Key components such as the motor, battery, and electronic control systems meet IP67 protection standards, offering high dust and water resistance to ensure reliable operation in harsh environments.





- ▶ **New Body Design:** The new family-style body structure with a sloping rear design offers a wide rear view and a more novel appearance.



- ▶ **Premium Seats:** Equipped with a standard air suspension seat featuring a reclining backrest, forward and backward adjustment, and electric height adjustment. The control handle synchronizes with the seat, enhancing ease of operation and reducing driver fatigue.

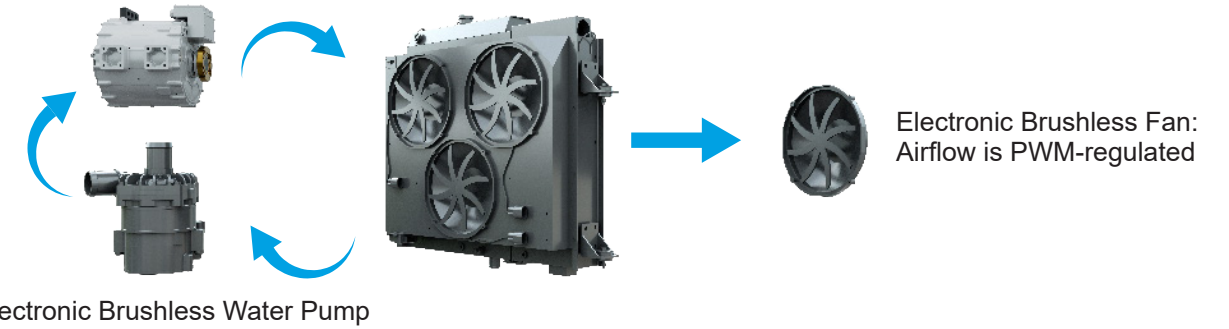
- ▶ **One-Touch Start:** Equipped with a one-key start feature, making starting more flexible and convenient, akin to a passenger vehicle.



- ▶ **Micro-Pressurized Cabin:** Designed with a cage-style full-frame structure for sound insulation and noise reduction. It features a panoramic, spacious interior with unobstructed visibility and a high-power heating and cooling air conditioner, providing a more comfortable driving experience.



- ▶ **Temperature Control System:** The motor and electronic control systems are equipped with an intelligent thermal management system. An integrated cooling radiator combines water and oil cooling, with electronic fan speed automatically adjusted via PWM based on motor and controller temperature, ensuring quiet, energy-efficient, and adaptive cooling for the motor and electronic controls.

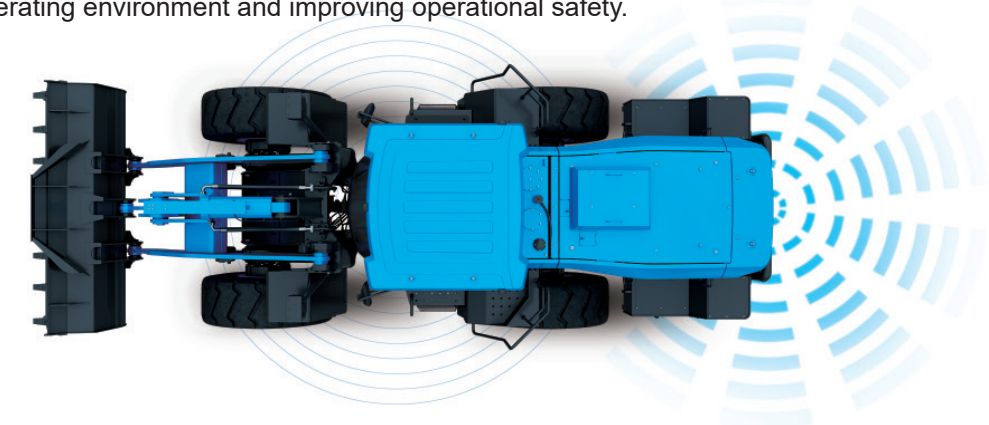


- ▶ **Touchscreen Display:** The next-generation large-screen intelligent management system provides real-time health monitoring of the machine's dynamic data and integrates Bluetooth and other entertainment interfaces to reduce operator fatigue. It also includes a fault alarm system, displaying error messages for easy maintenance.



- ▶ **Dual Pilot Handles:** Precision dual pilot handle controls with excellent micro-movement allow operators to control with ease. The F-N-R (Forward-Neutral-Reverse) shift button and left-handle shifting enable manual and automatic shifting, providing flexible operation that suits various user needs. Additional buttons include a floating button and a work mode button.

- ▶ **Safety Manager:** Equipped with a reversing radar that enables obstacle avoidance during reversing for increased safety. Four rear operating lights enhance nighttime visibility. 360° Surround View System: Provides comprehensive front, rear, left, and right monitoring with no blind spots, allowing real-time observation of the surrounding operating environment and improving operational safety.



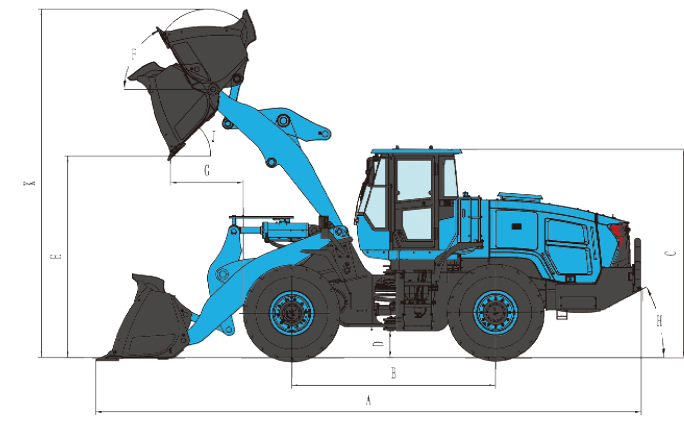


- New platform design featuring high performance, intelligence, long endurance, and heavy-load electric models.
- These are suitable for heavy-load conditions such as ports, mines, and quarries, meeting the varied needs of different customers.
- ENSIGN collaborates with research institutions and specialized suppliers to independently develop products with proprietary intellectual property.



**TECHNICAL PARAMETERS**

MODEL	YX656EV-GT / YX660EV-GT
Bucket Capacity (m <sup>3</sup> )	2.5-5.6(3.6)
Rated Load (kg)	5500 / 5800
Overall Operating Weight (kg)	18200 / 18900
Max. Breakout Force (kN)	165
Gradeability (°)	28
Min. Turning Radius (outer side of the bucket) (mm)	7200
Min. Turning Radius (outer side of the tire) (mm)	6375
Width(outer side of the tire) (mm)	2845
Total Cycle Time (s)	≤10
Dump Angle (°)	45
Dump Height (mm)	3370
Dump Distance (mm)	1230
Min.ground Clearance (mm)	462
Wheel Base (mm)	3400
Wheel Tread (mm)	2250
Max.lift Height (mm)	5900
Steering Angle (°)	38
Overall Dimension L*W*H (mm)	9140*3115*3485



**ELECTRIC CONTROL SYSTEM**

Power Battery Type	Lithium Iron Phosphate
Power Battery Capacity (kW·h)	282 / 350
Rated Voltage of Power Battery (V)	614 / 576
Peak Power of Walking Motor (kW)	240
Peak Torque of Walking Motor (N·m)	2400 / 2800
Peak Power of Hydraulic Motor (kW)	150
Peak Torque of Hydraulic Motor (N·m)	800

**HYDRAULIC SYSTEM**

Steering System	Load sensing hydraulic
Working Device Hydraulic System	Hydraulic Control Positive Flow System

**DRIVE SYSTEM**

Transmission Type	Electric control fixed shaft
Gears	2 Forward, 1 Reverse
Main Drive Type	Spiral bevel gear, first reduction
Hub Reduction Type	Planetary, first reduction

**BRAKE SYSTEM**

Service Brake Type	Full Hydraulic Brake System
Parking Brake(Emergency Brake)	Electric Control Hydraulic Power Caliper Disc

