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# XC978-EV



PURE ELECTRIC LOADER



**XCMG EARTHMOVING MACHINERY  
BUSINESS DIVISION**

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1. Scan the QR code to follow "XCMG Loading Machinery"  
2. Click the "Loader King" in the lower left corner to obtain  
more product details after registration

Main Features of the Product

XC978-EV Electric Wheel Loader is a newly developed 7-ton class pure electric loader by XCMG. The entire machine adopts XCMG's independently developed control system, significantly enhancing control performance. The innovative series-connected dual-motor drive form without a gearbox optimizes power matching, enabling the machine to have greater torque output and faster response speed, greatly improving work efficiency. Equipped with lithium iron phosphate batteries, supporting dual-gun fast charging.

**Power System**

Walking Motor: Utilizes series-connected dual-motor walking drive technology. The entire machine's walking system adopts two motors to drive the front and rear drive axles separately, with the two motors connected by a transmission shaft for power coupling transmission to meet all operating condition requirements. Drive Axle: Employs XCMG's self-made reinforced 7-ton class drive axle, featuring four planetary wheel structures on the wheel side for even load-bearing capacity, capable of bearing larger loads, and more adaptable to heavy-duty operating conditions. The installation of drive axle adds positioning pins to share the impact load borne by bolts, enhancing bolt reliability.

**Hydraulic System**

Equipped with XCMG's third-generation variable-displacement hydraulic system with load-sensitive pressure compensation technology, improving the machine's operation capacity and efficiency under various conditions. This system saves over 5% of engine power compared to the second-generation technology, integrates FNR shifting function into the pilot handle for convenient operation. It also features a new high-mounted hydraulic oil tank and filtration system, enhancing hydraulic oil cleanliness and circulation efficiency. The steering limit adopts a dual-mode of hydraulic flexibility and mechanical rigidity to reduce impact.

**Electrical System**

The machine is equipped with a 423kWh lithium iron phosphate battery, supporting dual-gun fast charging. At 20% battery capacity, the charging time is as short as 90 minutes. The battery thermal management system is controlled by BMS for safety and reliability. It features a touchscreen display, providing real-time parameters such as battery level, motor and controller temperature, motor speed, battery temperature, and air pressure. It also employs fully sealed connectors to significantly improve dust and water resistance and comes with an integrated closed fuse box for convenient and efficient inspection and maintenance.

**Cabin and Control System**

The cabin utilizes micro-pressure technology, providing a spacious interior and wide visibility. It features high-performance shock-absorbing dual-slide seats combined with a multi-directional adjustable steering column to meet different operator requirements. Equipped with a follow-up control box, air conditioning, radio, storage compartments, cup holders, mobile phone charging ports, etc., to create a comfortable, healthy, and safe driving environment.

**Chassis**

The front and rear chassis are designed for heavy-duty loads with thick steel plates, high strength, and strong load-bearing capacity. It features a reasonable layout, simple structure, reduced section and irregular welds, strengthened important load-bearing parts, capable of withstanding torque and impact loads under various conditions. Key structural components are analyzed by finite element analysis to ensure they meet various harsh conditions.

**Working Device and Bucket**

The working device is optimally designed, featuring a Z-type six-bar linkage structure with a single rocker arm, short tie rod, and horizontally mounted boom cylinder for small unloading impact and superior operational performance and efficiency. The main hinge points adopt a two-stage dust-proof structure to effectively prevent dust and protect lubricating grease from contamination, ensuring reliable protection for hinge pins and bushings. The main wearing parts of the bucket are made of wear-resistant plates for long service life. The lubrication method of the pin shaft adopts oil injection from the flange to improve pin shaft strength.

**Brake System**

The traveling brake adopts full hydraulic wet brakes with a fully enclosed brake structure to prevent impurities such as mud and water from entering, ensuring stable braking. The hydraulic oil circulates for cooling, providing good heat dissipation performance, reducing maintenance, and extending service life.

**Maintainability**

It adopts an electrically controlled rear flip-type engine cover, with an opening angle of up to 65°. After opening, the multi-in-one controller, battery BMS, water cooling unit, battery, PDU fuse, etc., are all conveniently positioned for maintenance.

**Versatility**

The XC978-EV electric wheel loader can be optionally equipped with high-dumping, clamp, 4.0~7.0m³ buckets with different capacities, and various working attachments to meet different operational requirements.

Main Configuration Parameters



Main Technical Performance

Item		Unit	Parameter
Main parameters	Rated Bucket Capacity	m³	4.5
	Rated Load Capacity	kg	7800
Walking motor	Rated Power	kW	2×160
Hydraulic motor	Rated Power	kW	80
Battery pack	Total Electric Capacity	kWh	423
	Voltage Platform	V	618
	Brand	/	CALT
Endurance time	General Operating Conditions	h	6-8hrs
	Overload Operating Conditions	h	5-6hrs
Main performance	Overall Machine Operating Weight	kg	25200±10%
	Overturning Load (Full Steering)	kg	≥15600
	Unloading Height	mm	3510
	Unloading Distance	mm	1080
	Wheelbase	mm	3650
	Tread	mm	2360
	Maximum Traction Force	kN	205±5%
	Maximum Lifting Force	kN	210±5
	Tire Center (Turning Radius)	mm	6195
	Boom Lifting Time	s	≤6.0
	Three-Item Sum Time	s	≤10.7
	Maximum Gradient	°	27
Noise	Steering Angle	°	40±1
	Next to the Driver's Ear	dB(A)	≤75
Travel speed	Radiation Noise	dB(A)	≤105
	Forward I/II Gear	km/h	18/35
Dimensions	Reverse I/II Gear	km/h	18/35
	Overall Length	mm	9350
	Overall Height	mm	3620
	Bucket Width	mm	3230

- The technology of XCMG wheel loaders is subject to constant improvement and upgrading. In case the specifications or detailed appearance contained in this brochure differ from actual products, the latter shall prevail.
- XCMG reserves the right of final interpretation for the above. Our products may be modified without prior notice to users.