

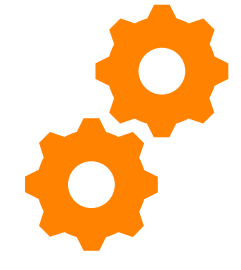


マウントエナジージャパン株式会社

Remote-controlled tracked
self-propelled lawn mower

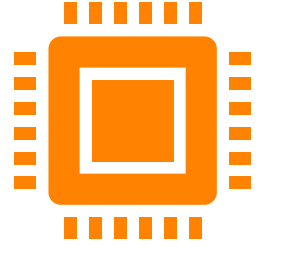
MC700

Product Features



Whole machine design:

Load-bearing body, high-efficiency and high-power travel system, tank-track type, oil-electric hybrid, anti-skidding system, active and passive skidding floating blade, air-assisted lifting mechanism, adaptive mowing device.



Control Systems:

Vehicle-grade control and electrical system, industrial-grade anti-jamming remote control system, speed control and detection system, traction control system, manual and automatic traveling operation modes, LCD display of the whole machine status.



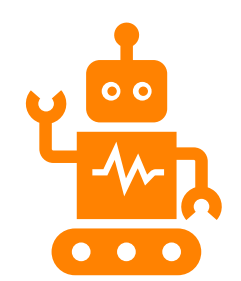
Powertrain:

Adaptive range extender system, Honda's top-quality engine, high-power AC and DC discharge function.



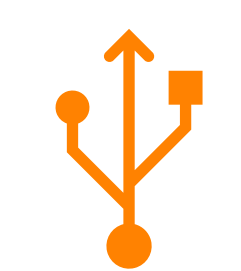
Safety Configuration:

Body stabilization system, ABS brakes, electronic anti-roll function, tilt protection function, rapid, fall and roll stop function, no operation automatic shutdown.



Intelligent Functions:

Straight line hold function, anti-collision function, collision stop function.



Extended functions:

Route planning, inspection detection, IOT control.



Product Function

1. The whole machine adopts load-bearing three-dimensional frame, thickened brand high-strength steel welding, tensile, compressive, torsion strength; modular design, five components can be quickly assembled and repaired; dual-guided elastic support column and profiling cutter disk, to avoid damage caused by hard impact and vibration of the cutter disk.
2. 3kW closed-loop brushless motor drives the traveling system independently, the efficiency of high-speed transmission device reaches more than 95%, and the torque of the whole machine reaches 175N-m, which makes it easy to climb slopes and cross obstacles. Closed-loop speed control and detection system, 0-4km/h stepless speed change.
3. Tank track design, approach angle reaches 45°, super terrain adaptability, climbing angle $\leq 40^\circ$, vertical obstacle $\leq 15\text{cm}$; composite track, high tensile strength, good cutting resistance, anti-wear; grounding pressure is small, easy to pass through the mud swamp.
4. Directional speed manual operation mode (MT) and directional speed automatic operation mode (AT) to meet the different operators' habits and scenarios of use.
5. Self-developed adaptive range extender system, adjust the output power according to the load changes, saving energy consumption, spike suppression current stabilization system, to achieve stable power output; equipped with high-power air-cooled generator and filtration system, which can achieve high-power AC and DC discharge, to meet the requirements of long-time use.
6. Outdoor grade control box, centralized arrangement of operating panels, protection grade IP55, operation, troubleshooting information and precautions are clearly posted to facilitate operation and maintenance.
7. Industrial grade remote control, protection grade IP65, with fall protection; standard 433MHz band, no need for radio filing, direct use; remote control signal bypassing obstacles and through the ability to strong anti-interference ability, the same space to support at least 100 sets of machines operating at the same time, the remote distance of 500m; lithium-ion rechargeable batteries, rechargeable and replaceable, to meet the needs of a variety of needs.
8. The whole machine three-color light display machine state, including oil warning, power warning, straight line keep, electric control box temperature warning and safety tilt warning; remote control to achieve the whole machine control, including the engine one-key start-stop, walking control, speed control, cutter disk lifting and lowering and cutter speed, etc.; remote display real-time display of the operating state, including operating time, maintenance reminders, drive, operating mode, driving mode, safety tilt detection, obstacle detection and safety tilt mode. The remote control display shows the operation status in real time, including operation time, maintenance reminder, driver condition, operation mode, driving mode, safety tilt angle detection, obstacle detection, lamp status, signal strength and remote control power level.



Product Parameters

Item		Unit	MC700
Vehicle Information	Overall dimensions (L×W×H)	mm	1420×1090×650
	Vehicle weight	kg	320
	Whole machine speed	km/h	0-4
	Working efficiency	m ² /h	2500 ^{*1}
	Minimum ground clearance	mm	90
	Maximum safety tilt angle	°	45
	Range (pure electric)	Min	30
	Horizontal motion rated load	kg	500
	Power source		Hybrid power
	Whole machine display information		Voltage, power, temperature, low fuel alarm, straight line hold status, various alarm messages
	Remote control display information		1. Machine status: self-test information, total operating time, purely electric working time, mileage, engine working time, maintenance reminder, low fuel alarm, low battery alarm, drive condition, operating mode, driving mode, straight hold status, tilt detection, obstacle detection, lamp status; 2. Machine control status: emergency stop, engine ignition off, cutting disk lift, driving direction (forward and reverse steering); 3. Remote control information: signal strength, remote control power;
Control system	Controller		ECU
	Remote Control		Industrial Digital Display
	Remote Control Distance	m	≤500
	Remote control signa	MHz	433
	Communication Frequency	Hz	10
	Engine maintenance reminder		Screen Icon Alerts
	Auto Park		Yes
	Hill Start Assist		Yes
	Body Tilt Detection		Yes
	Vehicle Speed Detection System		Yes
	ABS Brake System		Yes
	Electronic Anti-Rolling System		Yes
	Traction Control System		Yes
	Body Stabilization System		Yes
	Anti-interference		Hundreds of devices do not interfere with each other
	Sensor Mounting Reservation		LIDAR/CPS/RIDAR/CAM/GNSS/RTK
	Protection class		Automotive grade IP65
Travel system	Drive type		Crawler
	Crawler type		Tank type
	Traveling motor power	kW	2×1500
	Traveling speed	km/h	0-4
	Traveling operation mode		AT/MT
	Driving torque	N·m	175
	Brake		Yes
	Brake release		Yes
	Minimum Turning Radius	m	0
	Climbing ability	°	≤40
	Track elevation angle	°	45
	Vertical obstacle crossing	cm	≤15
	Front and rear inclination	°	≤45
	Left/Right Tilt	°	≤45
Engine system	Model		honda gxv630
	Type		Air-cooled four-stroke two-cylinder vertical shaft gasoline engine
	Power	kw/rpm	Maximum power 15.5/3600
	Maximum torque	N·m/rpm	48.3/2500
	Total exhaust volume	cm ³	688
	Oil capacity	L	1.9
	Oil Drain Valve		Yes
	Grass dumping device		Official Standard Dump Tray
	Fuel tank capacity	L	10
	Fuel level display		Liquid level meter
	Low Fuel Alarm		Display and tri-color light
	Fuel tank cover		Locking
	Fuel outlet		Universal port
	Fuel tank drain valve		Yes

Product Parameters

Item		Unit	MC700
Vehicle Information	Battery Brand		Ricoh
	Cell Composition		SLA (Sealed Lead Acid Rechargeable Battery)
	Battery capacity (20 hours rate)	AH/hr	23
	Low Battery Alarm		Display and tri-color light
	Extended range system		Adaptive
	Generator Protection		Filter
	External Power Supply	V/W	24/480 (DC)
	External DC power supply interface		Cigarette lighter
	Pushbuttons		304 stainless steel with light
	In-box electrics		Anti-vibration Terminal
	Outside the box		Vehicle-grade wiring harness
	Charging time	hr	8
	Protection class		IP55
Mowing system	Cutting disk		Floating
	Cutting width	mm	700
	Cutter disk lifting device		Flexible lifting
	Lifting aid		Air spring
	Stubble height	mm	5-90
	Stubble height display		Mechanical
	Height indicator		Mechanical
	Cutter material		Manganese steel
	Type of cutter		Segmented
	Number of cutters	pcs	2
	Rotational speed of cutter		Adaptive control
	Protection against hard objects		Clutch protection
	Quick access port		Yes
Safety Configuration	Control temperature alarm	℃	65 (display and tricolor light)
	Anti-skidding system		Yes
	Emergency stop button		Yes
	Fall stop		Yes
	Rollover stop		Yes
	Crash stop		Yes
	Remote control signal		Loss of downtime protection
	Protection racks		Yes
	Transmission protection		Yes
	Grass protection		front and rear leather curtains
	No-operation power-off time	min	30
	Remote control protection		anti-drop protection
	Control box lock		Yes
	Remote control protection		IP65
Accompanying accessories	Charger	pcs	1
	Remote Control	pcs	1
	Remote Control Charger	pcs	1
	Remote Control Battery	pcs	1
	Remote Control Waist Strap	pcs	1
	Electric Control Box Key	pcs	1
	Fuel tank key	pcs	2
	Instruction manual + three packages		1
Optional Accessories	USB Charger	24V	cigarette lighter connector
	Inflatable pump	24V	optional
	AC Output		Optional 110V/2000W
	Trailer Hitch		optional
	Collision Alarm		optional
	Lights		optional
	External mower tray		optional
	Cargo Rack		optional
	Trailers		optional
	Snow pushers		optional
	Spraying kit		optional

Application Scenario



Photovoltaic
energy storage



Highways and
roads



Agricultural
production



Orchard forestry



Municipal
embankments



Airport premises



Tel: 0513-89110618 Web: global.satabot.com Email: Sales@jsmaibu.com