



FVT
RESEARCH
Heavy Duty Electric Drive Systems



The Kubota RTV-X-1140e

100% Electric

FVT Electric Drive System Reliability in a Dependable Workhorse

- 2-3 year body & chassis replacement program with accompanying drive system reconditioning
- Mine-proven, high quality, long life drive system
- Affordable initial cost
- High vehicle availability time
- Local service & support
- Best overall life cycle cost

SPECIFICATIONS

Vehicle Capacities		2 PPL	4 PPL
Net vehicle weight			1192 kg (2623 lbs)
Cargo bed load	500 kg 1102 lbs	300 kg 661 lbs	
Total Payload			739kg (1629 lbs)

Towing Capacity

Maximum towing capacity	590kg (1298lbs)
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Dimensions

Length	142 in
Width	63.2 in
Height	79.7 in

Travel Speed

Maximum	25 kph
(mine requested limits can be custom programmed)	

Capabilities (mixed grade)

Non-stop drive range (on flat)	90 km*
Non-stop drive time	3.5-4.0 hrs*

Standard Features

Full time 4WD - mechanical neutral for towing
Mine lighting (mine specific configurations)
Kubota factory OPS
Steel rim and HDWS tire package
Aluminum rims (no charge option)
Convertible seating from 2 to 4 persons
Mine grade wiring
Fully integrated drivers HMI touchscreen
Electronic throttle pedal

Options

Custom options for Mechanics / Mine Rescue / Special Use
Mine specific custom programming - safety / performance
Telematics
ROPS / FOPS upgrades
Skid plate package
Extended range battery
Enclosed cab w/heat & AC
Specialty rims & tires
Six-person seating
SAHR Brake
Cold weather package

Battery Pack / Battery Management System

Battery chemistry	NMC
Capacity	23 kWh
Useable	18.4 kWh
Service Life	6-8 years to 80% capacity**
Cooling	None required
BMS	Fully integrated
Sealed Unit	Built to IP66 standard

On-Board Charger

3Ph 12kW 600V (60A)	Time to Full Charge 2.0 hrs
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Traction Drive Motor

IPM electric motor	45kW - Continuous
Peak efficiency	95%
Maximum torque	140 N·m (103 ft·lb)
Continuous torque	71 N·m (52 ft·lb)
Cooling	Liquid

Safety Features

Emergency Stops (x2)
High voltage Isolation fault detection
High voltage interlocks on all high voltage connectors
Battery contactor status LED's
Electric System fault alarms / displays on HMI
Battery over-current protection limits
Battery over-temperature protection limits
Battery high voltage lockout

Transaxle Type

Mechanical direct drive w/tow mode motor disconnect
Forward - Reverse

Brakes

Wet disc service brakes

Suspension

HD Front suspension - Double wishbone (greaseable)
HD Rear suspension - Double wishbone (greaseable)

*Results will vary depending on road conditions, speed and grade