

KABISA

CHARGING OPTIONS

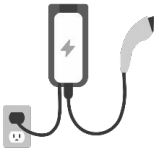

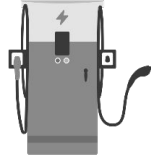


Charging Basics

Glossary:







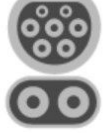



- **EVSE:** Electric Vehicle Supply Equipment or also known as an EV charging station.
- **Ports or Plugs:** The plug on the end of the cable that connects the EV charger to the vehicle. Ports frequently refers to the number of plugs on a charging station.
- **Cable:** The cable that connects the vehicle to the charging station.
- **kW:** A common electrical unit of power - 1,000 watts.
- **kWh:** A kilowatt-hour is the unit of energy over time. One kWh is equal to 1,000 watts of power for one hour of time. A microwave oven or a hair dryer use about one kW. But not typically for an hour at a time. This is the energy the vehicle uses instead of gasoline.
- **Electrical Panel:** Contains circuit breakers and distributes electricity throughout the building through electrical wiring.
- **Conduit:** Steel or aluminum tubing used to route and protect electrical wiring.
- **EVs:** A full Battery Electric or a Plug-in Hybrid Electric Vehicle driven by an electric motor with power from the battery. The battery is primarily charged by a charging station.
- **BEVs:** Battery Electric Vehicles that are only powered by electricity. (All Kabisa vehicles are BEVs)
- **PHEVs:** Plug-in Hybrid Electric Vehicles with both a gasoline engine and a large battery that can be plugged in to recharge
- **Range or All Electric Range (AER):** The distance that an EV can travel on a full charge.

Charging Speeds

Level 1	Level 2	Level 3
		
up to 3.5kW Portable AC charger Plug into normal AC outlet Perfect to charge overnight	up to 22kW AC charging For home or businesses that need faster charging	Over 22kW DC charging For fast charging stations Needs special grid upgrade

Charging Standards:

- All of Kabisa's cars and most EVs in Rwanda use the **GBT** standard
- Stand alone adapters and adapting cables are available to bridge between the standards

	China	EU	Japan	N. America	Tesla (US)
AC (slow)	GBT 	Type2 	Type1 	Type1 	NACS 
DC (fast)	GBT 	CCS2 	CHAdEMO 	CCS1 	

ALTERNATING CURRENT

AC CHARGERS

AC chargers are most commonly used for home and business charging. The typical maximum charging power is 7kW single phase (or 22kW for three phase).



Portable Charger (Level 1) with Outlet

Est. charging speed 10-60 km per hour

Make	Kabisa
Power	up to 3.6kW
Gun Standard	GB/T or Type2
Description	Portable AC charger with current limiting function, with max charging current of 16A. An outdoor schuko outlet is installed on premise alongside the charger.
Unit Cost	RWF 300,000 (excl. install cost)



Simple AC Charger (Level 2)

Est. charging speed 40-120 km per hour

Make	Whitelabel
Power	7kW single phase
Gun Standard	GB/T or Type2, cable attached
Description	Level 2 AC charger for faster charging of electric vehicles. The unit is not connected to the internet or
Unit Cost	RWF 700,000 (excl. install cost)



Internet Connected AC Charger (Level 2)

Est. charging speed 40-120 km per hour

Make	Wallbox
Model	Copper SB
Power	7kW single phase 22kW three phase
Outlet Standard	Type 2, no cable attached
Description	Internet and app connected EV charger with a built in energy meter for remote monitoring and control. A built in RFID can be used for authorisation control.
Unit Cost	RWF 1,500,000 (excl. install cost)

Notice that the actual charging power might be limited by the 'onboard charger' of your vehicle. Most electric vehicles only support single phase AC charging. Prices provided are indicative only and do not include additional wiring, protection, and installation costs.

DIRECT CURRENT

DC CHARGERS

Electric vehicle fast chargers use DC (direct current) to charge the vehicle's battery. DC chargers are modular in design and can vary from 10kW to up to 150kW.

DC Fast Charger (Level 3) Wall Mount

Est. charging speed up to 250 km per hour



Model	DC Fast-Charger wall mount
Type	DC Fast-Charger
Power	up to 40kW
Gun Standard	Single or dual gun GB/T or CC2
Description	Wall mounted DC charger provides up to 40kW in charging power. The unit supports the OCPP standard and can be remotely monitored using a backend system.
Unit Price	Starting RWF 4,500,000 (excl. install cost)



DC Fast Charger (Level 3) Pedestal Mount

Est. charging speed up to 900 km per hour

Model	DC Charger in pedestal
Type	DC Fast-Charger
Power	Up to 150kW
Gun Standard	Single or dual gun GB/T or CC2
Description	Pedestal mounted DC charger provides up to 150kW in charging power. A standard size is 60kW. The unit supports the OCPP standard and can be remotely monitored using a backend system.
Unit Price	Starting at RWF 8,500,000 (excl. install cost)

Notice that the actual charging power will be controlled and limited by the vehicle battery controller. Look at your vehicle specification for the maximum DC charging speed. DC charger installations are often limited by power limitations on the distribution network or transformer. Upgrades to the infrastructure might be needed. Kabisa will advise on the available charging speed at a site inspection and available power audit.

Prices provided are indicative only and do not include additional wiring, protection, and installation costs.

CHARGING ACCESSORIES



Portable Charger (Level 1)

Est. charging speed 10-60 km per hour

Make	Kabisa
Power	up to 3.6kW
Gun Standard	GB/T or Type2
Description	Portable AC charger with current limiting function, with max charging current of 16A.
Unit Cost	RWF 200,000



Charging Cable (Customizable Ports)

Make	Kabisa
Type	Charging Cable
Standard	Type 2 to Type 2, OR GB/T to Type 2
Description	5 meter cable for Charging
Unit Cost	RWF 200,000



Charging Pedestal

Make	Kabisa
Dimensions	1300 x 250 x 250
Description	Metal pedestal that is mounted on a concrete foundation for use at public parking space. AC chargers and charging sockets can be mounted on the pedestal while protection circuitry is mounted inside the pedestal.
Unit Cost	RWF 500,000 (excl. install cost)

Prices provided are indicative only and do not include additional wiring, protection, and installation costs.

Charging Network

Kabisa clients and cars get full access to the Kabisa Charging Network in Rwanda, **Would you like to be a part of the network?**

Kabisa Network (Installed)	Type	Power (kW)
Kigali - Norrskén 1 + 2	AC charger L2	22
Kayonza - Imigongo ArtCafe 1	AC charger L2	7.36
Muhanga - Stafford 1	AC charger L2	7.36
Kigali - Mundi Center 1	AC charger	7.36
Kinigi, Dian Fossey Campus	AC charger L2	7.36
Gisenyi - SP 1	AC charger L2	7.36
Musanze - SP 1	AC charger L2	7.36
Kabisa Garage 1 - 3	AC charger L2	7.36
Nyirangarama SP 1	AC charger L2	7.36
Nyanza - Stafford 1	AC charger L2	7.36
Kimihurura - Tugende 1	AC charger L2	7.36
Rungunga - SP 1	DC charger L3	40

Kabisa Network (coming soon)

- Akagera Park - Akagera Game Lodge
- Akagera Park - Akagera Rhino Lodge
- Akagera Park - Ruzizi Tented Lodge
- Cyangugu - Mantis Kivu Marina Bay Hotel
- Gashora - RICA Campus
- Huye - Chinese Restaurant
- Katuna - Katuna Border Post
- Kibuye - Cleo Lake Kivu Hotel
- Kirehe - Rubis Kirehe Service Station
- Nyagatare - Mantis Epic Hotel
- Nyanza - Stafford Coffee
- Nyirangarama - Sina Gerard
- Nyungwe National Forest - Kitabi Center
- Rubavu - Migano Cafe
- Volcano National Park - Ndaza Escape

Key:
 Green – Partner Chargers
 Yellow – Installed
 Orange – Planned

[Link to Map & List](#)

