RAYVOLT

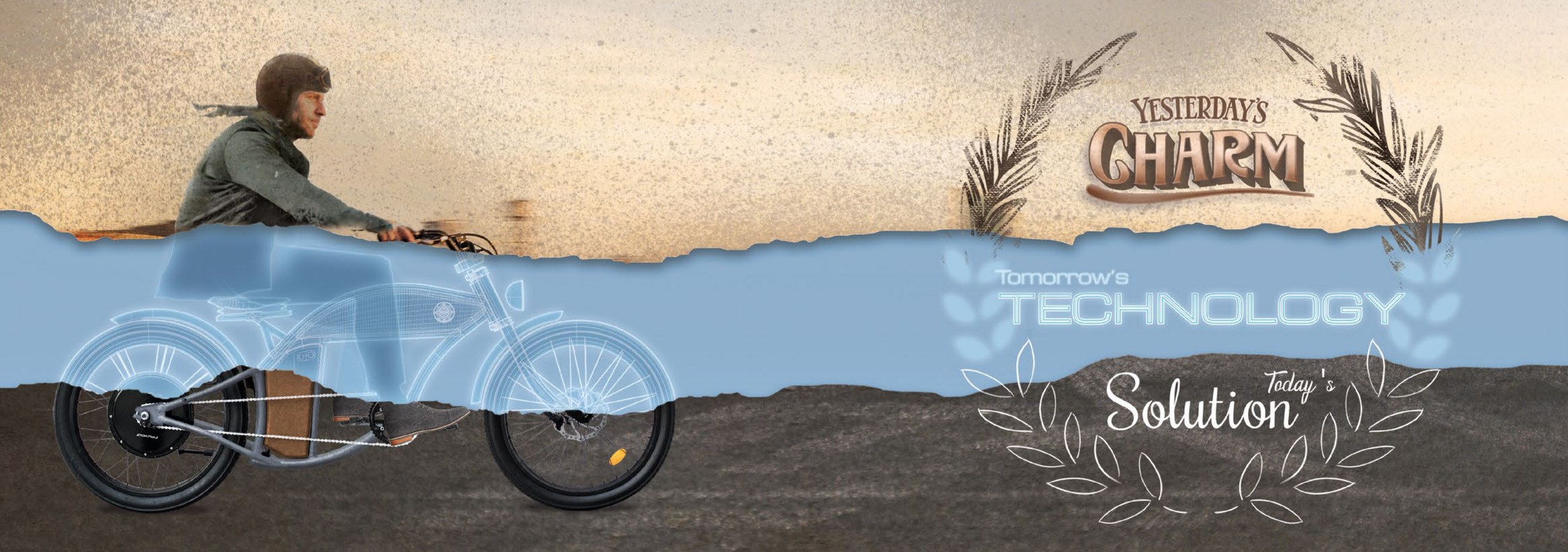
Catalogue

THE RAYVOLUTION

The Rayvolt philosophy is to promote alternative transportation by offering our customers a clean, high-tech, and stylish way to commute.

The name comes from the Sun's rays and the electrical unit Volt. Put together, sounds like its homonym "revolt".

The Sun's rays, the voltage and the revolutionary spirit are the fundamentals behind our brand.


YESTERDAY'S
CHARM
Tomorrow's
TECHNOLOGY
Today's
Solution

Cruzer

TIMELESS DESIGN

The original Rayvolt model, The Cruzer, was influenced by the first era of motorcycle from early 1900, the counter rock culture of 1960's Cafe Racer with a twist of California Beach Cruzer. This unique design combined with smart technology (EIVA) and state of the art BLDC motor stands out from the crowd.

A timeless piece of transportation.


JOIN THE REVOLUTION

Gewzee

COLOR AND TRIM

Get your custom color

Clock Work Orange

British Racing Green

GUN METAL GREY

TORINO

THE GETAWAY BIKE

The Torino is a variation of our flagship model, the Cruzer. While still keeping the curved and powerful look of the frame, it has a sportier design; The look of a Cruzer with a more ergonomic geometry. Its sleek wide tires, compact profile and low center of gravity make this bike an ultra high-performing, City Carving Speedster. Its strong and aggressive profile, with hump-backed tubing, is reminiscent of the shape of a young bull, or “Taurus” in Latin; that’s why it’s called the Torino.

TORINO

COLOR AND TRIM

Get your custom color

pearl WHITE

GRAPHENE
grey

electric
green

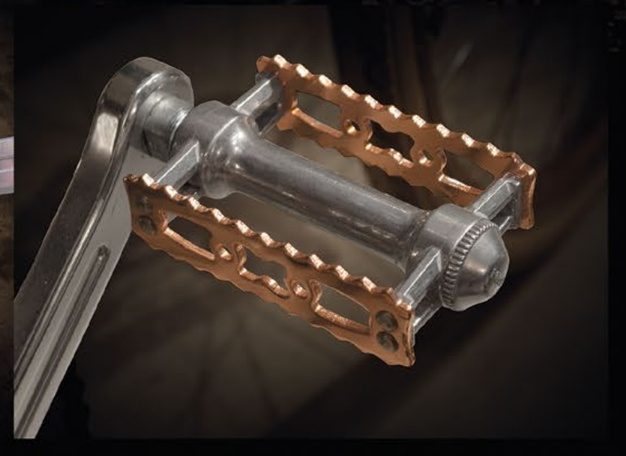
Ambassador

Neoclassic Spirit

Classic, yet far from conventional. Ambassador is the most aristocratic aesthetics bike that Rayvolt has designed to date. Delicately strong, this model combines a retro and neoclassical look with a focus on the details. This puts the bike in a class of its own that offers the perfect product for users who like traditional bicycles.


CAYVOLT
CAYVOLT


CAYVOLT



Ambassador

COLOR AND TRIM

British Green

Royal Blue

Burgundy Wine

Clubman

Live the city

A compact and urban bike that combines sport and refined style. For those who love the streets and the night. A comfortable vehicle for life in the city.


RAYVOLT

Clubman

COLOR AND TRIM

Black Shadow

British Green

Beachin'

Wild and adventurous

The Beachin' is Rayvolt's adventure bike. A large and muscle bicycle for the beach lovers. Its size and big wheels are perfect for riding through sand or on dirt roads. Despite its dimensions, it remains a stable and manageable bike.


RAYVOLT

Beachin'

COLOR AND TRIM

Vintage Green

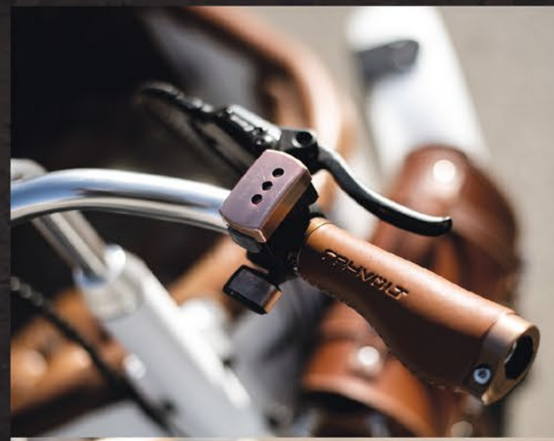
Laguna Blue

The Trixie

Enjoy your daily life

This is the idea that sparked the Rayvolution; how do you combine a bike (the ultimate vehicle in an urban environment) with carrying young children around the city, and transporting other items, like shopping? This stylish vintage-looking, Cargo Tricycle allows you to safely carry 3 children, or an adult and a child, as well as all your groceries. Its low center of gravity allows the bike to safely turn at speed unlike its competitors.

With comfortable vintage leather, child seat belts and isofix fittings to “lock in” baby carriers, this bike has everything needed for transporting your family in comfort. This bike combines a great vintage look with the latest smart technology.



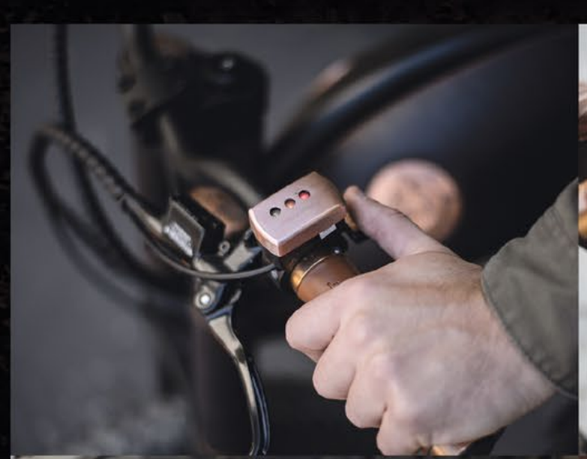
The Trixie

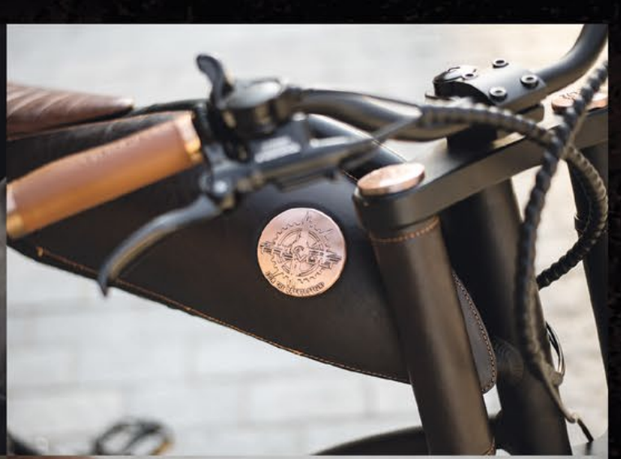
COLOR AND TRIM

Ringo

The Street Cowboy

Off-Road yet urban. Compact but generous. Vintage yet modern. Ringo is a stylish post-apocalyptic looking compact bike, made for the city and the road with an all terrain versatility. This practical two-seater bike has a head-spinner look, that will let you be the eye-catcher of the road while riding with someone on the back. This bike combines a great look, a comfortable position, and the features of all the latest Rayvolt smart technology.





Ringo

COLOR and TRIM

RAW
SILVER

CLOCKWORK
ORANGE

SHADOW
BLACK

Tomorrow's TECHNOLOGY

EIVA

The EIVA is Rayvolt's custom designed software which is used to control, customize, and monitor your bike*.
The EIVA computer can be mounted to the handlebars and is ready to go when you are. The app can be downloaded for use on an existing smartphone.

1. 360 Display
Monitor speed, battery state, MPH/KM Run, bike status and adjust pedal assistance.
2. Bluetooth
Monitor the connection between the bike and EIVA®.
3. Driving modes
Select a predesign configuration.
4. Adavanced Settings
Customize all the parametres of your bike.
5. Support
Direct contact our Support Team.
6. Music
Play your music, your way.
7. Maps
GPS access.
8. RegenFit
Recharge your batteries and train indoor.

*Available for all models except Beachin' and Clubman

EIVA App
Avaliable for iOS & Android

Technical Support
Cloud based

Technical Support directly from your EIVA device

Need assistance?
Contact our Rayvolt Support Team from the Menu of your connected EIVA device or App.

With a simple touch, send us all the parameters of your bike. This information will be used to identify and diagnose any issue you may have, and give you the proper solution.

Contact our team using the EIVA App

Send your bike's status

And we will find the proper solution

RAYTRACK

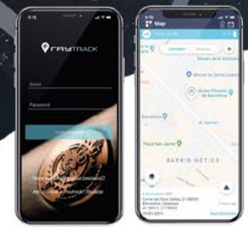
Using **Raytrack**, you can check your bike's* location in real-time from your mobile device, anywhere in the world.

Raytrack uses GPS, GSM, and surrounding Wifi IPs to track the bike's location.

When the bike is within 20 meter range, Raytrack uses Bluetooth for short-range communication, which will display distance as a percentage as you approach the bike's pinpointed location.

GPS WIFI BEACON IoT

*Available for Cruzer, Torino and Ambassador



RAYTRACK iOS

Avaliable for iOS & Android
www.raytrack.rayvoltbike.com

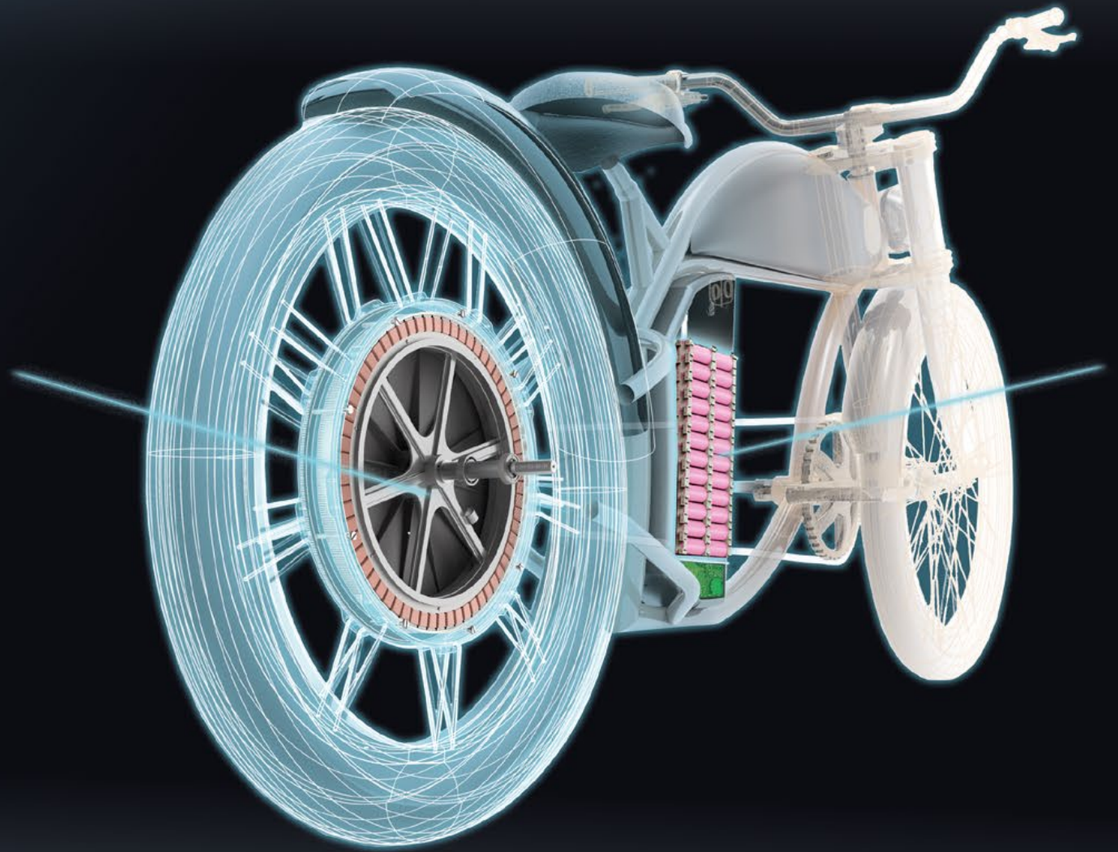
The Motor

Rayvolt hubs are a complex brushless 3 phase dc motor comprising 48 different copper coils and magnets that are placed on the outermost perimeter of the motor for the best possible torque.

The controller receives heat and position data from the coils and within one millisecond computes where to put the next load.

Such accuracy produces a Pure Sine Wave (PSW) current, offering unmatched ride comfort:

More Acceleration
More Torque
More Response
Less Noise
Less Vibration
Less Consumption



The Battery

At the core of any electric vehicle, its performance and life expectancy are directly linked to the type of cell used. The capacity of the battery pack* also depends on the number of cells used. Rayvolt uses 13 cells in a series to reach a nominal voltage of 48V. At peak voltage, a full charge of 54.6V gives incredible power.

We use a minimum of 4 cells in parallel (52 cells in total) or 8 cells in parallel (104 Cells in total). This gives an unmatched capacity of 550Wh and 1100Wh - most of the industry uses 300 to 360Wh.

Battery quality is linked to how the cells are packed and used. Using a state-of-the-art battery management system in our packs, each cell is connected to it before delivering the charge. This high-tech design balances the charge between each cell and can cut the connection in case of a short circuit. This ensures the best possible performance while making the battery safer.

*Std Battery or Dual Battery only for Cruzer, Torino, Ambassador and Trixie

Smart Features

AI adapts to cycling environment with **Gyrosensor**

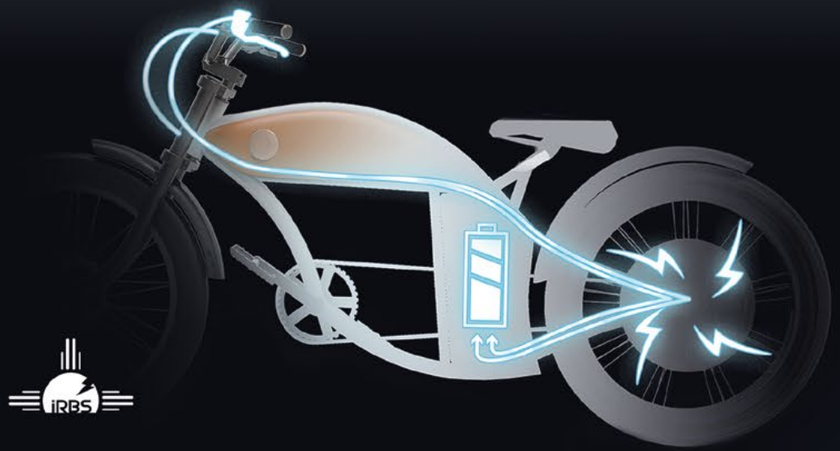
Intelligent Pedal Assist with multiple choices

Power assistance with gyroscope hill detection

Motor aid self adjust

Dual Sensor Crank Set

The Electronic Crank is fitted with a Load Cell measuring the torque applied to the pedal as well as the crank rotary speed. The controller computes those two values, and with our algorithm, provides a perfectly smooth pedal stroke based on the pressure you apply.
A Real Bionic Sensation!



Use bike inertia to **recharge** your battery

Intelligent Regenerative Brake System

We created an electronic braking system, fitted into the brake levers, that sends a data signal to the controller that provokes a reverse effect in the motor. This converts torque into resistance using the wheel inertia to generate electricity and recharge the batteries.

In simple words, regenerative braking acts like an ultra powerful dynamo when the levers are pulled.

The intelligent iRBS is linked to EIVA's built-in gyroscope allowing the bike to detect the cycling environment. It then provides the necessary amount of regenerative brake according to the angle of the hill.

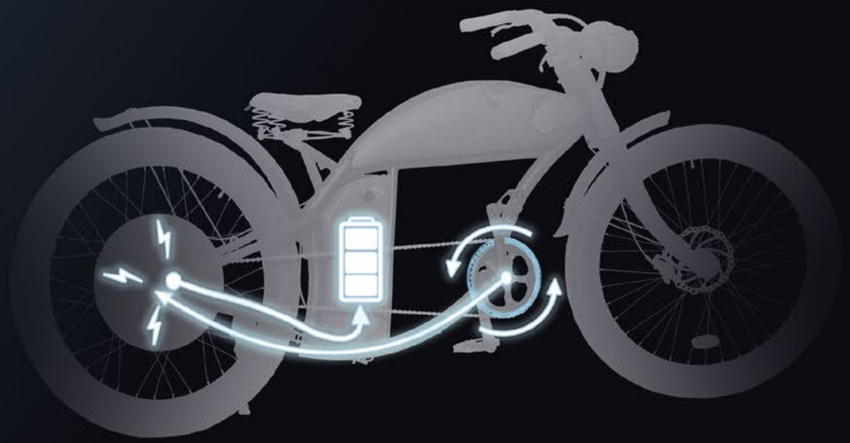
iRBS paired with the cloud-based iTS allows you to remotely lock your rear wheel.

Smart Features

Regenerative Back-Pedaling Brakes

While rotating the pedals backward, a pedal sensor sends a data signal to the controller, which provokes a reverse effect in the motor.

Similar to a classic coaster brake with the extra benefits of battery recharge and a custom adjustable brake curve based on the back-pedaling speed.



Regenerative Back-Pedaling patent: PCT/EP2019/068090

RegenFit patent: 17/205,083
*Available for 2021 Torino, Ringo and Cruzer

REGENFIT

Recharge your batteries and train indoor

RegenFit™ is a smart feature and App for convert any Rayvolt bike into an indoor smart trainer. And, by using the electromagnetic field of the motor, its hall sensors, plus the cadence and torque sensors, we can also recharge the battery.

Through the sensors, you can monitorize all your training on the App, or connect them to cycling simulators.

RFIT iOS

Avaliable inside EIVA App

Today's Solution

With a simple touch on the EIVA* App you can customize your riding experience

PEDAL

25 km/h Pedal Assisted Bike

MOPED*

*Coming soon. This option may not be available depending on the laws of your country and the model of your Rayvolt bike.

Chargers

Rayvolt
Li-ion Charger Standard

For:
Cruzer | Torino
Ambassador | Trixie | Ringo

Output: 54.6V 4A
Std Battery: 3 hours charge*
Dual Battery: 6 hours charge*

Rayvolt
Li-ion Charger Standard 36V

For:
Beachin' | Clubman
Ringo

Output: 42V 4A
Std Battery: 2,5 hours charge*
XL Battery: 4 hours charge*

*Charge time based on internal tests

Train

RegenFit

RegenFit turns your Rayvolt ebike into an indoor smart trainer, and allows you to charge your battery by pedaling. Up to 20% charge in 30 minutes!

*Depending on the settings

Charge

Electricity

While enjoying your Rayvolt bike you can charge the battery thanks to our Regenerative Brake System and the Regenerative Back-Pedaling Brakes.

&

Althought the electric power we normally use leaves an inevitable carbon footprint, **in Rayvolt we are continiously innovating to minimize it.**

Change

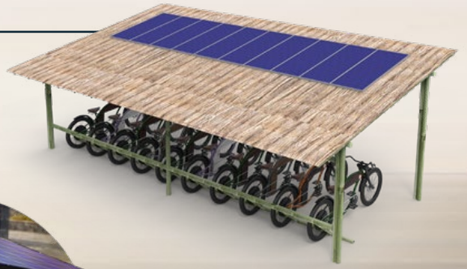
Solar energy

Since we started our company, we have been testing new ways of charging our bikes with renewable energy. We have developed several projects based on Solar Energy.*

*Ask us for project status, prices and availability.

Solar Docking Station

10 bikes Bamboo Solar Park
Custom design 100% ECO

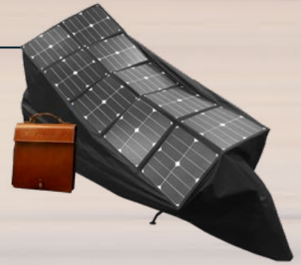


Solar Dock

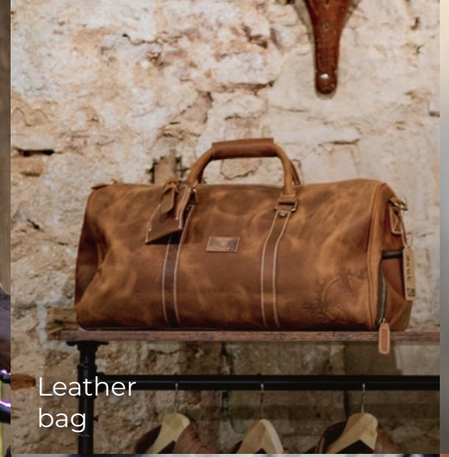
Foldable Solar Bike Cover

Std Battery:
15% Charge in 1 hour*
Dual Battery:
7% Charge in 1 hour*

*Depens on solar condition



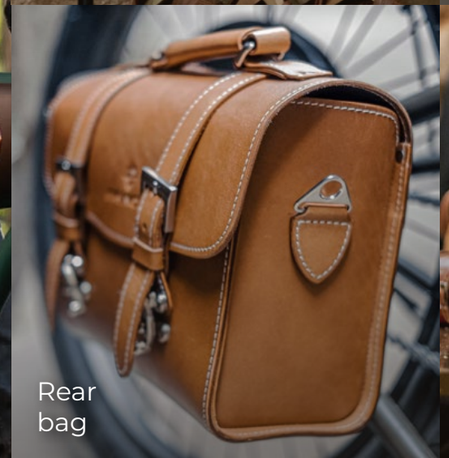
RAYVOLT
Lifestyle



Leather
bag

Leather
mudguard

Leather
jacket



Rear
bag

Vintage
Helmet

Discover more Rayvolt lifestyle
www.rayvoltbike.com

Portable Battery

The Trixie

Use your battery cover as a regular bag.
Wear it! Handle and confortable for everyone.

Beachin'

The battery cover includes a security system
to prevent theft.

Clubman

Take your battery easily and charge
it wherever you want!

Ambassador

A beautiful design to the last detail
that transmits perfectly the brand identity.

	Motor	Battery	Dimensions	Tires	Frame	Display	Brakes	Speed control
Cruzer	Smart Hub 50 Nm - 250 W Power Hub 100 Nm - 250 W	Std Battery 48 V - 10,5 Ah Dual Battery 48 V - 21 Ah	L size 33 kg 1890 x 990 x 720 mm M size 29 kg 2165 x 1030 x 720 mm	L size 26” x 3.0 M size 24” x 3.0	Rayvolt Aluminum 6061	EIVA Drive 2.0 or MicroEIVA (optional)	Rayvolt Oil Disk Brakes with E-Regenerative 10A-50A	PAS (Pedal Assist System) Torque Sensor (optional) Thumb Throttle*
TORINO	Smart Hub 50 Nm - 250 W Power Hub 100 Nm - 250 W	Std Battery 48 V - 10,5 Ah Dual Battery 48 V - 21 Ah	30 kg 1770 x 1050 x 680 mm	26” x 3.0	Rayvolt Aluminum 6061	EIVA Drive 2.0 or MicroEIVA (optional)	Rayvolt Oil Disk Brakes with E-Regenerative 10A-50A	PAS (Pedal Assist System) Torque Sensor (optional) Thumb Throttle*
Ambassador	Smart Hub 50 Nm - 250 W	Std Battery 48 V - 10,5 Ah	22 kg 1770 x 1000 x 700 mm	28” x 5/8	CrMo	EIVA Drive 2.0 or MicroEIVA (optional)	Rayvolt Oil Disk Brakes with E-Regenerative 10A-50A	PAS (Pedal Assist System) Torque Sensor (optional) Thumb Throttle*
Beachin’	Bafang Motor 40 Nm - 250 W	Std Battery 36 V - 10,5 Ah XL Battery 36 V - 16 Ah	31 kg 2020 x 1150 x 800 mm	26” x 4.0	Rayvolt Aluminum 6061	Bafang Display	Tektro Mechanical Disk Brakes 180 mm or Hydraulic Brakes	PAS (Pedal Assist System) 7-speed Shimano Tourney TZ Thumb Throttle* (optional)
Clubman	Bafang Motor 40 Nm - 250 W	Std Battery 36 V - 10,5 Ah XL Battery 36 V - 16 Ah	27 kg 2000 x 1010 x 680 mm	26” x 3.0	Rayvolt Aluminum 6061	Bafang Display	Tektro Mechanical Disk Brakes 180 mm or Hydraulic Brakes	PAS (Pedal Assist System) 7-speed Shimano Tourney TZ Thumb Throttle* (optional)
The Trixie	Smart Hub 50 Nm - 250 W Power Hub 100 Nm - 250 W	Std Battery 48 V - 10,5 Ah Dual Battery 48 V - 21 Ah	72 kg 2220 x 1070 x 926 mm	24” and 20” x 3.0	Steel + Rayvolt Aluminum 6061	EIVA Drive 2.0 or MicroEIVA (optional)	Rayvolt Oil Disk Brakes with E-Regenerative 10A-50A	PAS (Pedal Assist System) Torque Sensor (optional) Thumb Throttle*
Ringo	Smart Hub 50 Nm - 250 W	Smart Battery 36 V - 10,5 Ah 36 V - 13 Ah 36 V - 16,5 Ah 48 V - 14 Ah	29 kg 1687 x 980 x 700 mm	20” x 41/4”	Rayvolt Aluminum 6061	EIVA Drive 2.0 or MicroEIVA (optional)	Rayvolt Oil Disk Brakes with E-Regenerative 10A-50A or Mechanical Disk Brakes	PAS (Pedal Assist System) Shimano 7 speed Torque Sensor (optional) Thumb Throttle*

*Depending on your country legislation

The specificatios are subject to change without prior notification

eXXite

eXXite is the new generation of modern electric bikes developed by Rayvolt, that brings experienced bicycle designer Mat Rauzier's vision to reality in a completely new way.

The brand sets the bar for the electric bike of the 21st century with multiple patented technologies that take its performance to the next level.

DISCOVER THE NEW GENERATION

eXXite by RAYVOLT


JOIN
THE
RAY
VOLUTI
ON