MAGNUM BIKES

INFORMATION PACKET

2020

magnum
ELECTRIC BIKES

MAGNUM IS A DESIGN ORIENTED BIKE COMPANY WHOSE ELECTRIC BIKES ARE AS POWERFUL AND DURABLE AS THEY ARE AESTHETICALLY PLEASING.

WHETHER COMMUTING IN TOWN OR RIDING TRAILS, A MAGNUM ELECTRIC BIKE WILL DELIVER PERFORMANCE AND STYLE TO KEEP RIDERS MOVING FASTER AND FARTHER.

WE ARE COMMITTED TO BRINGING OUR CUSTOMERS THE HIGHEST QUALITY AND PERFORMANCE POSSIBLE FROM OUR E-BIKES AND CUSTOMER SUPPORT.

About Us

Founded in 2010 Magnum Bikes has been a leader in innovation and design of electric bicycles.

We believe electric bicycles are changing the concept of travel providing a clean, efficient and exciting new mode of transportation that is affordable to all.

Our innovation, design and focus on quality allows us to produce stunning high level electric bicycles that lead the e-bike market internationally.

Our knowledge and control of the manufacturing process allows us to provide you with the maximum product at the minimum price.

Management Team

YONI KAYMAN, CEO

Yoni Kayman is the Founder, President, and CEO of Magnum Bikes. He started the company in 2010 and has helped it grow to what it is today. Yoni is an experienced entrepreneur with over 12 years leading successful businesses.

JESSE LAPIN, COO

Jesse Lapin is the COO of Magnum Bikes. He helped to launch and currently leads the Magnum USA team. With a background in International Business, Jesse is an adept leader in wholesale distribution and sales.

E-Bike Components

6 MAIN COMPONENTS OF AN E-BIKE

MOTOR

Electric motor that when engaged spins the rear wheel.


BATTERY

Provides power source for the bike.


DISPLAY

Electronic readout for the bike and user interface to send commands to the controller.



CONTROLLER

Main brain of the bike that houses the motherboard, receives instructions from display that sends commands to the rest of the bike.


THROTTLE

The push of a button engages the motor to increase output and provide jolt of power to the bike.



PEDAL ASSIST SENSOR (PAS)

Magnets that sense the movement of the pedals to engage the motor and aid riders movement of the bike.

E-Bike Class Types

Electric bikes have 3 main types that they are classified into. These classes are used as identifiers for the type of bike, and how that bike is receiving assistance from the electrical system. Each country, state, and city have their own specifications for what the classes are and what class is permitted for riding in specific areas. Below is the federally defined requirements for each class in the USA. All of the Magnum models can be adjusted to meet the requirements for each class depending on the need of the rider. Always make sure to check out your local laws before riding!

CLASS 1

This is the most common type of ebike. As the rider pedals, the electrical system gives the rider assistance. These bikes do not have throttles and have a maximum speed of 20 mph.

CLASS 2

Class 2 ebike have all of the same components of Class 1, but have a throttle (20mph max) along with the pedal assist.

CLASS 3

Class 3 ebikes can have both a throttle (20mph max) and pedal assist with a cap of 28 mph. Wattage is important as well - to remain within all of the 3 classes an ebike must have at or below a 750 watt motor.

Drive Types/Batteries

The components magnum currently uses in manufacturing are highlighted in blue

MOTORS

FRONT HUB

Located on the front wheel. Provides power by spinning the front wheel creating the sensation of being "pulled". Simplest design but most limited capabilities.

REAR HUB

Located on the back wheel. Provides power by spinning the back wheel creating the sensation of being "pushed". Affordable and wide range of capabilities, but makes bike weight uneven (heavier rear).

MID-DRIVE

Centrally located. Sends power to the drivetrain instead of the wheel hub. Creates sensation of more balanced riding. Quieter and mor balanced, but have more parts than can break and more expensive.

THROTTLE VS PEDELEC

THROTTLE

Rider simply twists or pushes the throttle and the bike gets going without any assistance from the rider. This is the biggest drain on the battery.

PEDAL ASSIST

Motor activates when the pedals are in motion. This allows the rider to still get a workout with the extra boost to ride further or in harder conditions.

TORQUE VS CADENCE

TORQUE PAS

Measures the amount of power you are putting into the pedals and it will increase or decrease the electric assist based on your pedaling power.

CADENCE PAS

Provide assistance when the cranks of the bike are turning. More simple and also affordable.

BATTERY MOUNTING

RACK MOUNT

Battery is mounted above the rear wheel under the rear carrier rack. Versatile for nearly any frame but affects turing corners and handling.

DOWN TUBE

Most common on production e-bikes. Battery is mounted from the front of the bike down to the crank area. Placement improves handling.

Industry Growth

- In 2018 more e-bikes were sold in the Netherlands than traditional bikes
- In Germany 1 in 3 bikes sold were e-bikes, in Holland it was 1 in 2
- In the USA just 1 in 10 were e-bikes with estimated 91% year over year growth in the USA
- There was $77 Million in e-bike sales for 2017
- There was $143 Million in e-bike sales for 2018
- Projected $300 Million in e-bike sales for 2019

Reasons For Demand

- People are looking for more affordable and more environmentally friendly transportation. E-bikes eliminate the costs associated with a car but have a power source unlike regular bikes.
- It's a more accessible and limitation lifting form of exercise and outdoor leisure. Despite age, injury, or physical capability - individuals are able to enjoy bicycling at varying levels of intensity thanks to the assistance of a motor and battery giving the rider pedal assist and a trigger throttle.

Navigator

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 12AH
LI-NCM BATTERY

USE
Urban riding, commuting, capable on dirt and gravel roads

BODY POSITION
Semi-upright, hybrid

FRAME
Step thru frame/low step frame

500W geared hub motor	Hydraulic brakes	27.5" wheel

NAVIGATOR		METRO
Bigger Wheel/Bigger Frame	VS	Smaller Wheel/Smaller Frame
Fully Integrated Battery		Semi-Integrated Battery

Voyager

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 12AH
LI-NCM BATTERY

USE
Urban riding, commuting, capable on dirt and gravel roads

BODY POSITION
Semi-upright, hybrid

FRAME
Step over frame/high step frame

500W geared hub motor	Hydraulic brakes	27.5" wheel

VOYAGER	VS	METRO +
Fully Integrated Battery		Semi-Integrated Battery

Cruiser

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Cruising, urban riding, leisure riding
BODY POSITION
Upright, back leaning
FRAME
High step, beach cruiser frame

500W geared hub motor	Hydraulic brakes	26" wheel Big Ben Tire (thicker, comfort)

CRUISER	VS	METRO
Beach cruiser frame Upright body position Further reach to handlebars		Hybrid frame Semi-upright body position

Lowrider

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Cruising, urban riding, leisure riding
BODY POSITION
Upright, back leaning
FRAME
Low step, beach cruiser frame

500W geared hub motor	Hydraulic brakes	26" wheel Big Ben Tire (thicker, comfort)

LOWRDIER	VS	METRO
Beach cruiser frame Upright body position Further reach to handlebars		Hybrid frame Semi-upright body position

Ranger

30-60 MILES
PER CHARGE

750 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Cruising, urban riding, leisure riding
BODY POSITION
Upright, back leaning
FRAME
High step, beach cruiser frame

750W geared hub motor	Hydraulic brakes	26" Wheel 4" Thick Tire

RANGER	VS	CRUISER
4" Fat Tires 750W Motor		2.5" Tires 500W Motor

Payload

30-60 MILES
PER CHARGE

600 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Cargo, commuting
BODY POSITION
Upright
FRAME
Extended rear and front carriers

750W geared hub motor	Hydraulic brakes	26" Wheel

PAYLOAD

Cargo Carriers

Metro

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Urban riding, commuting, capable on dirt and gravel roads

BODY POSITION
Semi-upright, hybrid

FRAME
Step thru frame/low step frame

500W geared hub motor	Hydraulic brakes	26" wheel Big Ben Tire (thicker, comfort)

METRO Low step **METRO** Hydraulic brakes	**VS**	**METRO +** High Step **UI6** Mechanical brakes

Metro+

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Urban riding, commuting, capable on dirt and gravel roads

BODY POSITION
Semi-upright, hybrid

FRAME
High step frame

500W geared hub motor	Hydraulic brakes	700c wheel, Marathon tire (thinner, road cycling)

METRO+	VS	METRO
High step		Low Step
METRO+		**UI6**
Hydraulic brakes		Mechanical brakes

Peak

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Mountain biking, off roading, trail riding
BODY POSITION
Cycling, forward
FRAME
High step, mountain bike frame

500W geared hub motor	Hydraulic brakes	27.5" or 29" wheel, Smart Sam tire (knobby, more grip)

PEAK 27.5

Smaller wheel/smaller frame

PEAK

500W 48V motor
Hydraulic brakes

VS

PEAK 29

Bigger wheel/bigger frame

MI5

350W 36V motor
Mechanical brakes

Premium

25-55 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Commuting, urban riding, leisure riding
BODY POSITION
Upright
FRAME
Low step or high step folding frame

500W geared hub motor	Mechanical brakes	20" wheel

PREMIUM	VS	PREMIUM II
Mechanical Brakes		Hydraulic Brakes

Premium 11

25-55 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Commuting, urban riding, leisure riding
BODY POSITION
Upright
FRAME
Low step or high step folding frame

500W geared hub motor	Hydraulic brakes	20" wheel

PREMIUM II Hydraulic Brakes	**VS**	**PREMIUM** Mechanical Brakes

Classic

22-44 MILES
PER CHARGE

350 WATT
GEARED HUB MOTOR

36 V 13 AH
LI-NCM BATTERY

USE
Urban riding, commuting, capable on dirt and gravel roads

BODY POSITION
Upright

FRAME
Low step folding frame

350W geared hub motor	Mechanical brakes	20" wheel

CLASSIC FOLDING	VS	PREMIUM FOLDING
350 Watt 36 Volt motor		500 Watt 48 Volt motor

Classic 11

22-44 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Urban riding, commuting, capable on dirt and gravel roads

BODY POSITION
Upright

FRAME
Low step or high step folding frame

350W geared hub motor	Mechanical brakes	20" wheel

CLASSIC II	VS	CLASSIC
500 Watt 48 Volt motor		350 Watt 36 Volt motor

Ui6

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Urban riding, commuting, capable on dirt and gravel roads

BODY POSITION
Semi-upright, hybrid

FRAME
Step thru frame/low step frame

500W geared hub motor	Mechanical brakes	26" wheel Big Ben Tire (thicker, comfort)

UI6	VS	METRO
Mechanical brakes		Hydraulic brakes

Ui6+

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Urban riding, commuting
BODY POSITION
Semi-upright, hybrid
FRAME
High step frame

500W geared hub motor	Mechanical brakes	700c Wheel Smart Sam Tire

UI6+	VS	METRO+
Mechanical brakes		Hydraulic brakes

Mi6

30-60 MILES
PER CHARGE

500 WATT
GEARED HUB MOTOR

48V 13AH
LI-NCM BATTERY

USE
Mountain biking, off roading, trail riding
BODY POSITION
Cycling, forward
FRAME
High step, mountain bike frame

500W geared hub motor

Mechanical brakes

27.5"wheel, Smart Sam tire (knobby, more grip)

MI6	VS	PEAK
Mechanical Brakes		Hydraulic Brakes
One wheel size		Two wheel sizes

iMax S1+ Scooter

25-55 MILES	500 WATT	48V 10AH
PER CHARGE	MOTOR	LI-ION BATTERY

USE
Urban riding, commuting, leisure
BODY POSITION
Standing
MAX SPEED
20mph

350W motor	Mechanical brakes in front and back	10" pneumatic tire (inflatable)

ELECTRIC SCOOTER	VS	ELECTRIC BIKE
Lower cost, very little manpower, relies almost totally on motor/battery, more portable		Higher cost, manpower or motor power, more powerful, further distances

Magnum Departments

MANAGEMENT

The Management team handles operational and business success. They design, implement, maintain, and guide company growth.

RESEARCH & DESIGN

The research & design team focus on all things product production. They ensure that products are innovative, well-designed, and drive industry growth.

OPERATIONAL & CUSTOMER SUPPORT

This team works to support internal and external success through organization, administration, and relational excellence.

ACCOUNTING, FINANCE, & LEGAL COMPLIANCE

This team ensures that the financial success of Magnum Bikes is met through compliance and monetary growth.

INVENTORY & LOGISTICS

This team maintains international and national supply chain and physical product.

SALES

Retail Sales
The Retail team works directly with end customer to ensure overall customer satisfaction, meet sales goals, and promote the Magnum brand.
Wholesale Distribution
This sales team connects with partners to distribute, promote, and drive company growth.
B2B Sales
The B2B team works in conjunction with various partners to lead commercial sales.

MARKETING, MEDIA, & ECOMMERCE

This team works to develop and maintain brand image, voice, andcontent across various public channels.

TECHNICAL SUPPORT

The tech support team are product specialists that provide product assistance both internally and externally.

ASSEMBLY

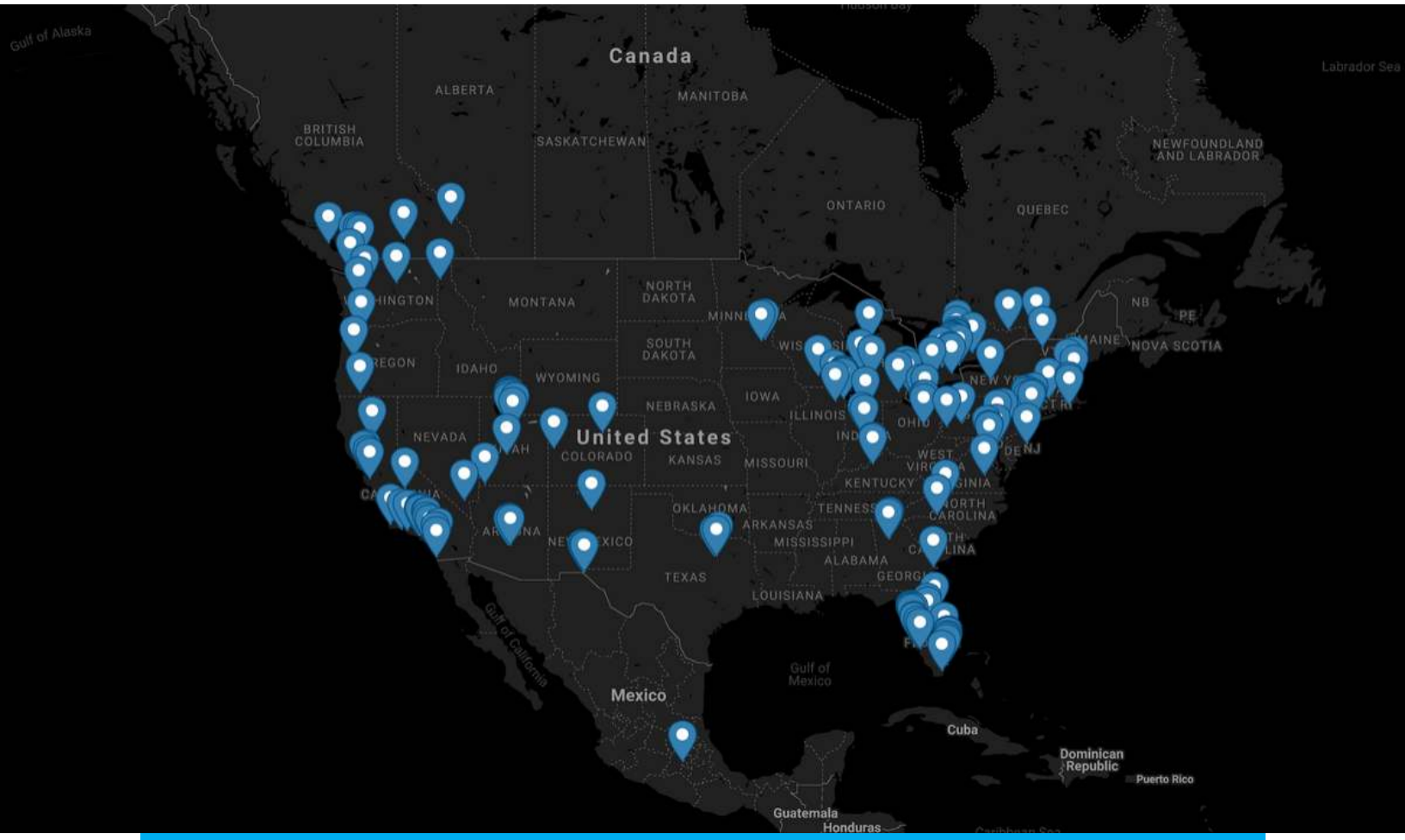
The Assembly team works to build and maintain quality control of product.

International Distribution Centers

Magnum Bikes has distribution centers located in:

USA
Canada
Israel
New Zealand

Magnum Bike Dealers



Magnum Bikes has over 200 certified dealers across the United States. They sell Magnum e-Bikes, and do maintenance and repairs on the bikes.