

Driving eMTB

# innovation

THE 2021 ROCKY MOUNTAIN POWERPLAY

POWERED BY

**DYNAME™**





# The History

BIKES.COM

## THE NUMBERS BEHIND DYNAMINE DEVELOPMENT

10

years of  
research

80,000

hours of  
engineering

10 million

CAD invested

3

patented  
technologies

Since 1981, Rocky Mountain Bicycles has lived at the foot of Vancouver's North Shore mountains, designing and testing mountain bikes in the rugged terrain that rises above.

In 2009, the concept for a revolutionary electric drive system was presented to the design team at the company's headquarters in Beauce, Québec. The forward-thinking vision paralleled Rocky Mountain's philosophies. Together, Propulsion Powercycle was created with the purpose of developing an innovative electric drive system which would be named Dynamine.

Three years later, in 2012, the design team debuted an urban electric bike featuring the proprietary Dynamine 2.0 drive. Shortly thereafter, we introduced North America to its first electric bike sharing program. At this point, Europe had embraced the e-bike. Consumers in North America were curious. Media was asking when we'd witness the first truly capable trail-ready eMTB. Rocky Mountain would provide the answer.

In early 2017, the Rocky Mountain Altitude Powerplay launched, featuring the third-generation Dynamine 3.0 drive developed collaboratively between our research centres in Vancouver, B.C. and Beauce, Quebec. Vancouver handled the bike and Quebec developed the drive system. The Powerplay was on.

In 2019, the Powerplay family, powered by Dynamine, expanded to three platforms – Altitude Powerplay, Instinct Powerplay, and Growler Powerplay. We were humbled by high praise from Velo Vert magazine in France, with the Altitude Powerplay Alloy 70 receiving the award for best eMTB, voted by riders and journalists.

The 2020 lineup adds a few more models to the mix, with Instinct Powerplay becoming available in Carbon. We are also taking one of our most capable trail bikes - the Instinct BC Edition - to the next level by adding the assistance of the Dynamine 3.0 drive system. Powerplay leads the way with diversity, quality and—most of all—a great ride.

"It rides like a real  
mountain bike,  
because it is a real  
mountain bike."

Rider:  
Wade Simmons

Photo:  
Ale di Lullo

Location:  
Italy

"I probably just had the most fun in the past 5 years of mountain biking in the last 2 seconds. My mind is just racing with the idea of what's possible."

WADE SIMMONS  
GODFATHER OF FREERIDE



# The Drive

## Lower RPM

Dyname spins at 1200 RPM (1/4 the competition's speed). Less whine. More efficiency.

## Higher torque

Virtual quads kick in when you need them and stand down when you don't.

## Proprietary design

Three patents. In-house customization. Limitless design freedom.

## Tuned to the key of human

Specifically designed to an MTB-friendly cadence and real world singletrack riding. No spinning out.

## A motor's intuition

Seamless power modulation between drive and human. Dyname reads your rhythm and responds to your ride.

## Better BB

The bottom bracket is part of the bike, not the drive. No creaking, less wear, and local shops can service it. We love local shops.

## Sealed for real

Like most mountain bikes, we allow moisture to flow through, and instead seal the *actual* electronics inside the case. IP67 certified waterproof connectors are used throughout.

## DESIGN FREEDOM

### Ride more, further, faster.

While developing the first-ever Rocky Mountain eMTB, we refused to be held hostage by existing drive designs. We built the drive to fit the bike, not the other way around. For ten years, our engineers dreamed, created, tested and meticulously improved upon Dyname until they got it right. The Dyname drive is compact, powerful, and smooth. It facilitates pure, unbridled design freedom, as evidenced by the seamless integration of the RIDE-9 adjustment system.

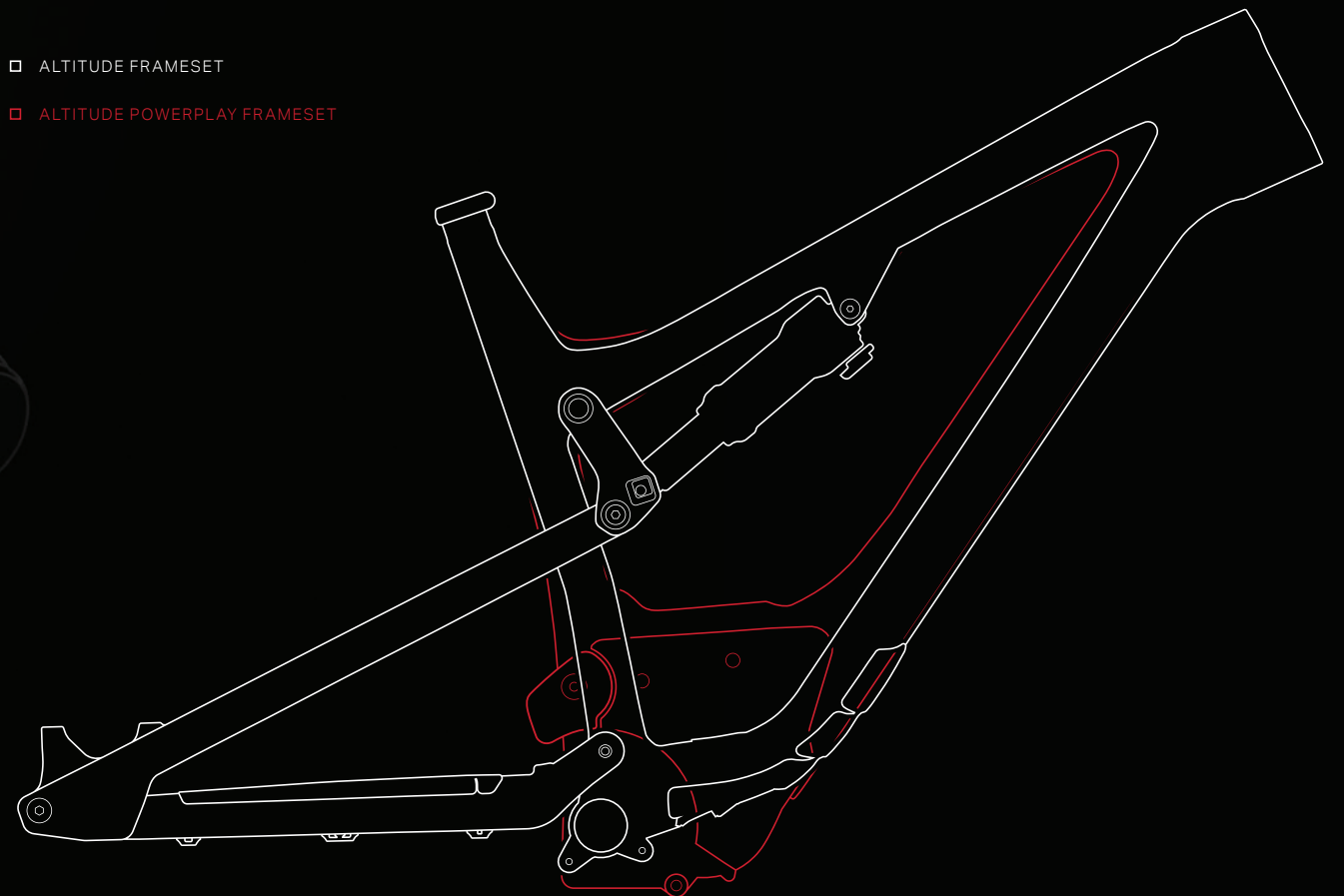
### We built the drive to fit the bike, not the other way around.

□ ALTITUDE FRAMESET

□ ALTITUDE POWERPLAY FRAMESET

### Design freedom in action

The Powerplay frames are not handcuffed to off-the-shelf drives. We put pivots where we want. We maximize our freedom in suspension design. We don't start with no-fly zones as a result of 3rd party integration. Rocky Mountain's engineering team enjoys a blank slate which ensures we can imagine, create, and—most importantly—ride the bike we want.





# What makes Powerplay Different

**A drive that responds immediately when you start. Intuitive everything. A sublime profile. More power. Tons of torque.**

2020 Instinct Powerplay Carbon 50



## But where's the battery?

Fully integrated into downtube for lighter weight, increased durability and sweet aesthetics.



## Force to the frame

Your pedalling force goes into the front triangle, not the drive. You can use real two-piece Race Face cranks, not eMTB cranks, as a result.



## iWoc remote

Compact. Bluetooth-enabled. All the info you need; none you don't.



## Customizable app

Escape the tyranny of factory settings. Pick your own levels of power-assist.



## Get up and go

Patented torque sensing technology means instant gratification, unlike anything else on the market.





# The Power behind the Play

## "How far does it go?"

It's a question we hear about eMTB batteries all too often. The answer isn't simple. Are you hammering flat fire roads, or turbo-lapping steep, technical singletrack? In the south of France on a warm summer day, or submerged in the deep dark dank of a North Shore winter? eMTB batteries can only take you as far as your legs go, but Powerplay elevates every rider to their potential.

## CHARGING TIMES



**672 Wh battery**  
80% in 2:10  
Full charge in 3:50



**632 Wh battery**  
80% in 2:05  
Full charge in 3:30



**500 Wh battery**  
80% in 1:40  
Full charge in 2:50



### Ridiculous elevation

With proper power management, Powerplay will yield 1,800-2,000 metres of climbing (based on 102 kg rider).



### Charge it

Our rapid-charging battery gets you to 80% capacity up to 66% faster than the competition.



### Brawn, brains, and beauty

We care about aesthetics. Powerplay not only rides like a mountain bike. It looks like one too.



### Efficient energy

Powerplay's superior 48-volt system increases range when compared to the standard 36-volt battery featuring the same capacity.

## STEP ON IT

When you step on the pedals, the Dymate 3.0 drive delivers immediately. Competitive systems can exhibit lag, apply power too abruptly (causing wheel spin or loss of control), and generally introduce odd sensations to riding. With Powerplay, beginning on a hill is easier than ever. Getting up to speed is simple. Dymate's electro-mechanical torque sensor measures chain tension through movement of a magnetic field, providing instant input to the brain of the drive. Less lag. More power.

Dymate needs to crunch numbers quickly, and lend support to the rider even more rapidly. When the chain moves, Dymate reacts instantaneously. How? Every time the chain straightens out, a magnetic field sensor measures the chain position. This sensor measures 1000 times per second. This extreme sensitivity helps maintain traction on greasy trails, allows for subtle torque modulation on complex terrain, and produces a natural-feeling power output.

## AHEAD OF THE CLASS

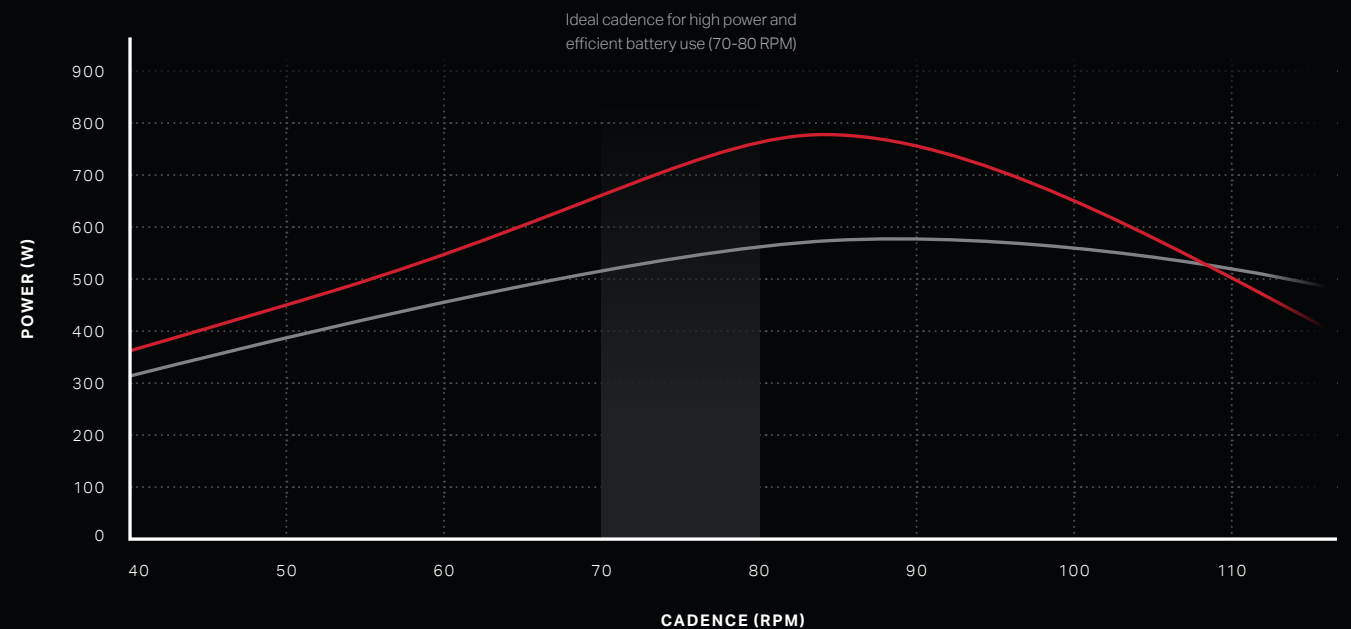
The Dymate 3.0 Drive features class-leading power, and torque measuring in at 108Nm\*. This means you can crush steeper hill climbs faster, and accelerate like a speed demon. No strange pedalling sensations. Modulation so smooth you won't even notice the RPMs kicked in.

\* converted to a gear ratio of 1:1 crankset to chainring.

### Motor power vs. cadence

**Max power:** 770 W

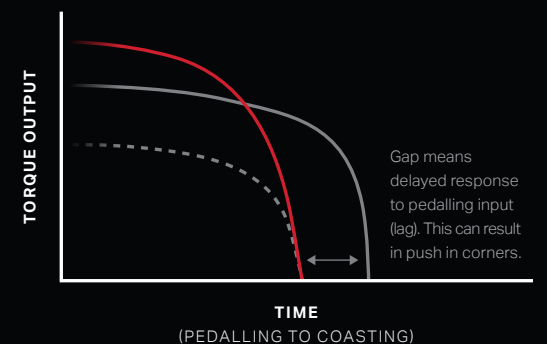
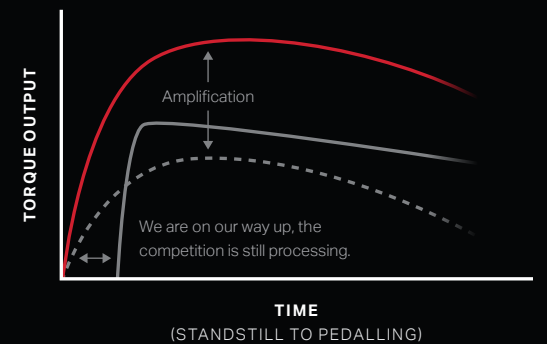
— DYMATE 3.0 DRIVE SYSTEM  
— COMPETITORS



### Torque response

**Max torque:** 108 Nm

— DYMATE 3.0 DRIVE SYSTEM  
-- RIDER  
— COMPETITORS



**Rider:**  
Julie Hoffman


**Photo:**  
Mattias Fredriksson

**Location:**  
Dolomites, Italy

# The new Overtimepack

## If some is good, more is better.

The Overtimepack allows you to ride your Powerplay farther than ever before, putting more time in on the trail before needing a charge. The Overtimepack drains fully before the battery in your Powerplay drains at all and can also fill the battery in your Powerplay without a charger.



**Weight**

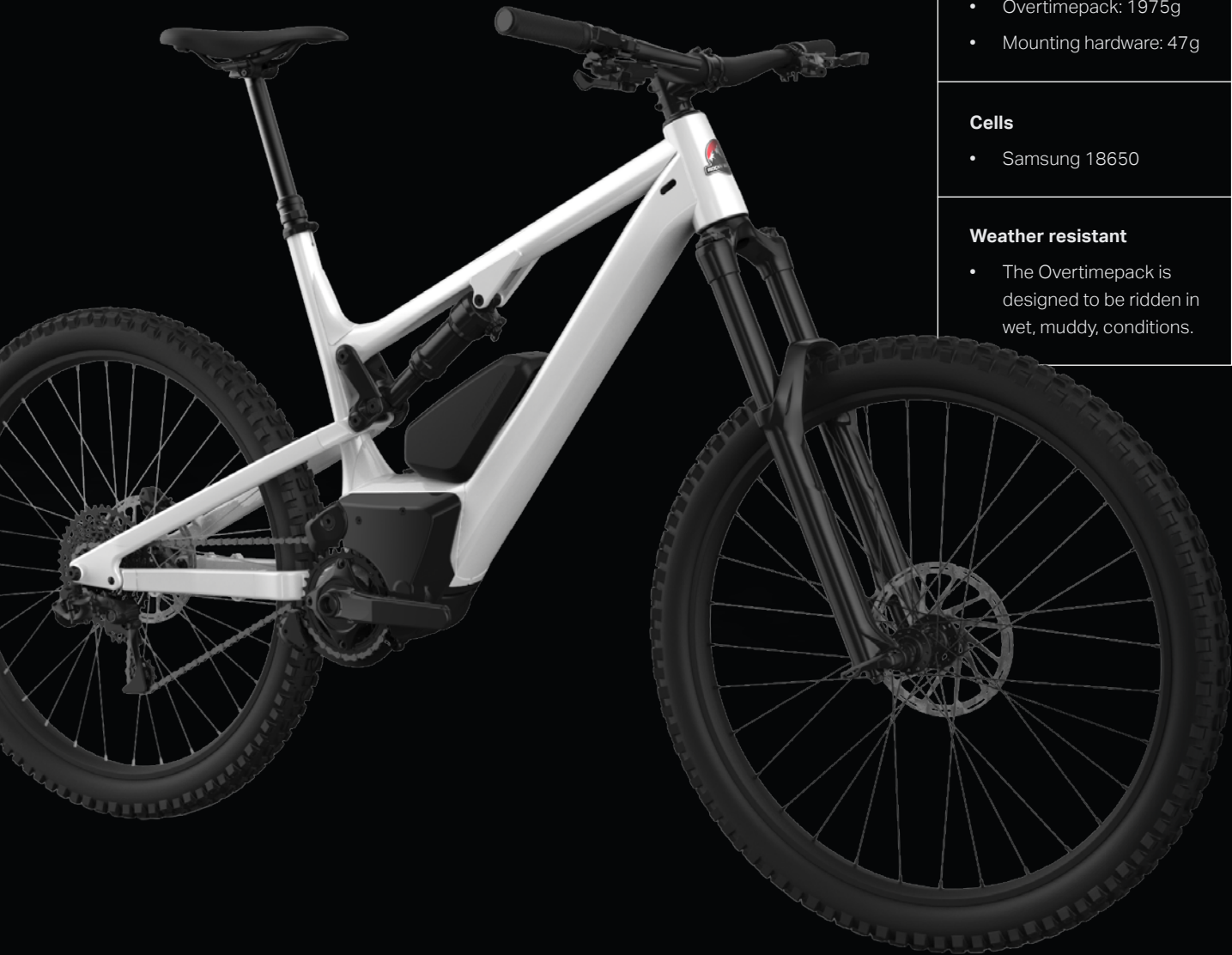
- Overtimepack: 1975g
- Mounting hardware: 47g

**Cells**

- Samsung 18650

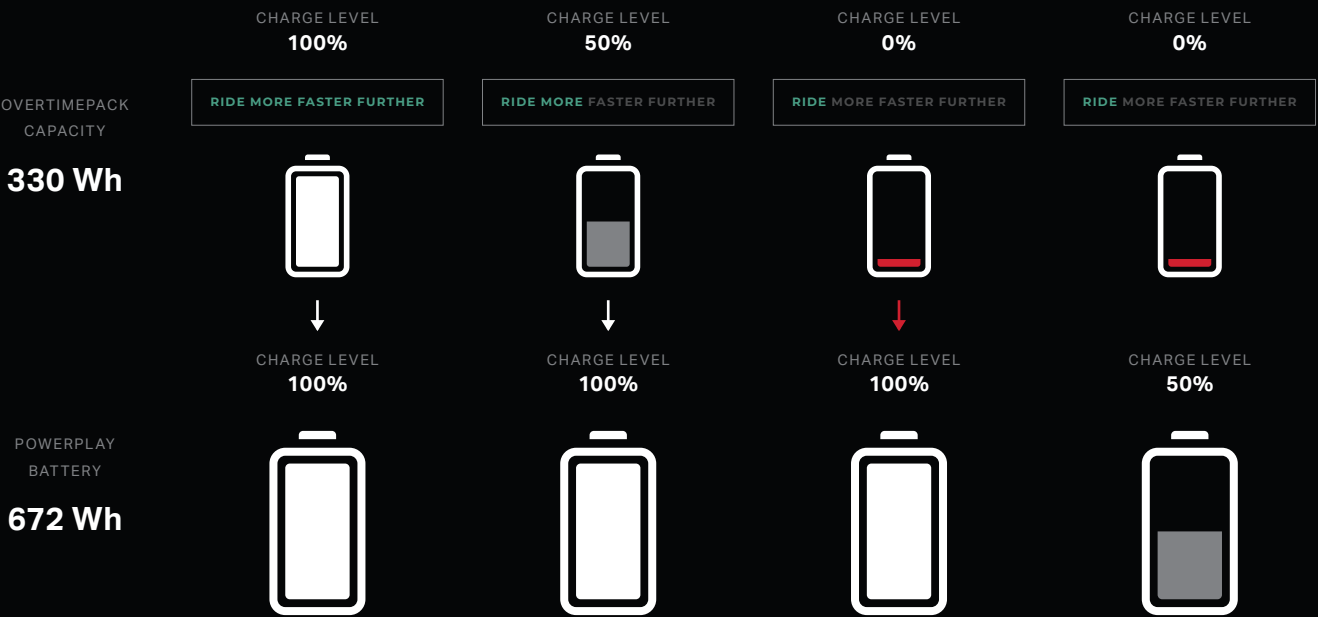
**Weather resistant**

- The Overtimepack is designed to be ridden in wet, muddy, conditions.

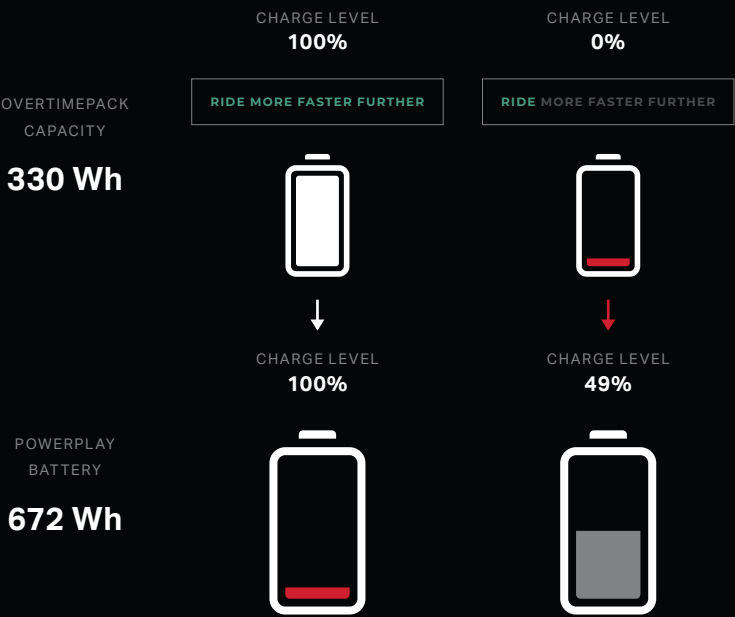


## BATTERY USAGE AND CHARGING

The Overtimepack drains its full 330Wh capacity before impacting the 672Wh battery in your Powerplay. Your iWoc remote will read as fully charged until you begin to work your way through the main 672Wh battery of the bike. The “Ride more, faster, further” indicator on the Overtimepack will let you know how much of your 330Wh battery remains.



If the 672Wh battery in your Powerplay is empty, the Overtimepack will charge your battery to nearly 50% in a little over 2 hours.



Using the standard Powerplay 5A charger, **you can charge your Overtimepack in a little over 2 hours.**

Do not use any chargers other than the standard Powerplay 5A charger, as they will damage the Overtimepack battery.





THE POWERPLAY LINE

# Altitude Powerplay Carbon

DESIGNED FOR  
**Aggressive Trail**

FRONT TRAVEL  
**160 MM**

REAR TRAVEL  
**150 MM**

WHEEL SIZE  
**27.5 Wide Trail**

The Altitude Powerplay brings cutting-edge power to an aggressive trail bike and opens the door to amazing terrain for all. This is our fully integrated, electric-assist mountain bike that takes our Altitude's legendary handling and ride quality and adds a compact, powerful drive system. The Dyname 3.0 drive system was designed in parallel with the frame, delivering ultra-short chainstays, optimized suspension kinematics, super-low centre of gravity, and class-leading torque. The result is an eMTB that actually rides like a proper mountain bike—perfect for everything from self-shuttling all mountain trails, finding flow between the descents, and squeezing in power lunch rides.



2020 Altitude Powerplay Carbon 90  
Check out the full lineup of Powerplay platforms and models at [bikes.com](https://bikes.com)

## Altitude Powerplay Alloy

DESIGNED FOR  
**Aggressive Trail**

FRONT TRAVEL  
**160 MM**

WHEEL SIZE  
**27.5 Wide Trail**

REAR TRAVEL  
**150 MM**

When we introduced the Altitude Powerplay it blew the doors off the mountain bike community as an aggressive, capable, and powerful eMTB. It's now available in an alloy frame so more people can experience the ride to go further and faster than ever before.



2020 Altitude Powerplay Alloy

## Instinct Powerplay Carbon

DESIGNED FOR  
**Trail**

FRONT TRAVEL  
**140 MM**

WHEEL SIZE  
**29" (27.5+ ready)**

REAR TRAVEL  
**140 MM**

The Instinct Powerplay will take you to the places you never thought possible. When it comes time to head out the door for that epic ride into the alpine, you'll be riding further and faster than ever before on what is our most versatile eMTB yet. Taking our Powerplay line up the next level, the Instinct Powerplay integrates our powerful Dyname 3.0 drive system with a 29" wheeled platform for fast rolling rides and long distances.



2020 Instinct Powerplay Carbon

## Instinct Powerplay Alloy BC Edition

DESIGNED FOR  
**Aggressive Trail**

FRONT TRAVEL  
**160 MM**

WHEEL SIZE  
**29" (27.5+ ready)**

REAR TRAVEL  
**155 MM**

Our Instinct BC edition has proven itself as one of the most capable bikes in our lineup. Now imagine what it can do with the assistance of our Dyname 3.0 drive system. Smash down chutes, rail through corners, and then turn it up to "ludicrous" to climb back to the top faster than you ever thought possible.



2020 Instinct Powerplay Alloy BC Edition





# WARRANTY

Every Powerplay bike is warrantied against defects in materials and manufacturing.

We stand behind our products. The warranty on the battery has been increased from 18 to 24 months, retroactively applied to all 2018 Altitude Powerplays already purchased.

Category	Term	Notes
Frame hardware	5 years	Front triangle & rear triangle
Hardware	1 year	Pivots, axles, etc...
Electronics	3 years	Drive, iWoc, sensors, charger
Drive components	1 year	Pulleys, pinions, transfer chain
Battery	24 months*	If stored for 3+ months, charge battery every 3 months. Failure to do so may cause damage.
Components	As per original manufacturer warranty	

\* For more detailed battery warranty information, please reference the owner's manual available on [bikes.com](#)

**Disclaimer:**  
If system is modified in any way, it can affect range and performance, and immediately voids the warranty.



**Rider:**  
Julie Hoffman

**Photo:**  
Mattias Fredriksson

**Location:**  
Dolomites, Italy



# ***ROCKY MOUNTAIN***<sup>®</sup>

## **DYNAME**<sup>™</sup>

*Rocky Mountain, its logo and other trade names are used by Rocky Mountain.  
Some technologies on Rocky Mountain products are patented or patent pending.*

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