



Falco
ELEVATE THE RIDE.



Rakesh Dhawan
President

To let dreams come true also means hard work. We have always dreamt of building the best eBike components in the world, and of creating a unique eBike experience. Achieving that with the Falco name means innovation and technological leadership. My team and I share the passion of striving for technical excellence.

Falco designs develops and manufactures eBike Systems for trikes, tandems, and bicycles. The Falco brand name has quickly become synonymous with speed, extraordinary experience, utterly seamless mobility, technology leadership, highest product quality and reliable customer service in the market for premium eBike Systems. It is our goal to improve the natural and urban environment by designing interfaces between human and machine, utilizing smart systems and green technology. We believe that our products are a crucial enabler to promote healthy living, reduce carbon emissions and - besides - change the mode of transportation, in particular in urban areas. While eBike systems not only reduce emissions, they also provide solutions to road congestion in urban centers, a growing challenge around the world. We remain committed to working aggressively on solutions for alternative mobility.





FALCO ADVANTAGE













Intuitive
Engagement

Real-World
Electric Assist

Infinitely
Adaptable
Enjoyment

Simplicity of
Operation

12 Most Important Characteristics of Falco eBike Systems

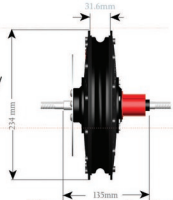
	Ultra-Efficient Operation	Falco's drive system delivers a seamless experience from 0 to 28mph. Ultra-fast with an ultra-efficient power delivery define our systems
	Extraordinary Torque and Sensor Technology	The most important aspect of a Falco Drive System is the intuitive engagement. This is achieved by an extra-ordinary built-in torque and speed sensor technology. The combination makes Falco the industry's most advanced eBike technology in the hub.
	Powerful	Motors with a 750W+ rating and torque up to 45Nm. Direct drive power is delivered directly to the wheel without any loss in chains, or gears. Enough power and torque for on and off-road riding.
	Extraordinary Controller	The built-in controller gives you extraordinary performance and saves precious space.
	Five Phase Drive Technology	The patented 5-phase technology provides 40% more power and torque with amazing efficiency at top speeds.
	28 mph Super-Efficient Commuting	With a built-in torque sensor, a controller and five phase technology, you can really move from 0 to 28mph effortlessly.
	Absolute Control	There is control and then there is an absolute control - with your feet and controls on your handle bars. Falco systems offer infinitely adaptable enjoyment.
	Zero-Resistance Free-Wheeling	Falco's direct drive has true zero resistance pedaling. The motor can be pedaled like a regular bike wheel even when the battery is off. When you run out of juice, you don't need to sweat it.
	Wireless e-Bike Console & Smart Phone Compatibility	Falco Direct Drive is the first wireless eBike console in the Industry. It is modular and adds additional control and benefits right on your handlebars without additional wiring. Falco is also the first company in the world to have Smart Phone apps with ANT+ and BLE compatibility.
	Ultra-Reliable	The primary goals of a Falco Direct Drive system are to have an ultra-reliable system. We achieved this by using a highly modular design approach. For example, the motor can operate independently without any commands from other components of the drive system.
	An Open System	An open system like a Falco drive system protects your investment for a long time. With other systems, you are locked into their batteries at the end of life of the batteries. Not with Falco. The Falco direct drive system can be operated with other batteries. The motor can keep on humming for a long time.
	Five Year Warranty	Falco's Mission is an extraordinarily reliable, and long lasting product. That is why we stand behind our product with 5-year warranty on the motor system. Falco is the first in the industry to offer a 5-year warranty.

H x m 750W+

Hx 7.1

The Hxm 750+ platform is designed for superior performance and efficiency. The platform is 11-speed cassette and disc brake compatible. This direct drive motor is based on our patented five phase architecture with zero resistance freewheeling and 40% more power and torque than conventional three phase motors. The top speed efficiency remains significantly high as compared to any other industry platform of comparable weight and performance.

Light Weight ~ 5.9kg (13 lbs.) //
High Efficiency ~ 90% //
High Torque ~ 45Nm //
High Power ~ 750W+ //
Zero Free Wheeling Resistance ~ 0.01Nm //
Rear Wheel Installation //
Disc Brake and Cassette Compatible //
24 or 36 or 48V Operation //
Wireless Communication Capability //
Analog Throttle and Brake //
Precise Power and Torque //
eBike Labs Diagnostic Interface //
High Speed Micro-Controller //
Smart Phone Compatibility //

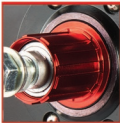


135mm Drop Out Standard
145mm, 160mm, 190mm and
Custom Drop Outs Available
32, 36, 40, 48 or custom
spoke hole arrangement
Vertical or Horizontal
Drop Outs Available

Integrated Electronics

16 Integrated Sensors

22-25 Five Phase Motor Architecture



Disc Brake Compatible

Integrated Torque and Speed Sensors
11-Speed Cassette Compatible





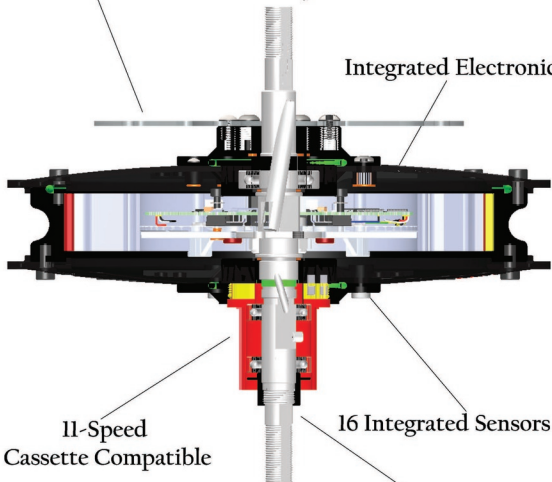
H x m 750W+

Hx 7.1

Disc Brake Compatible

12mm Solid Axle

Integrated Electronics



11-Speed
Cassette Compatible

16 Integrated Sensors

Integrated Torque and Speed Sensors

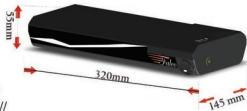
Li 1 - 400Wh, 11.6Ah

Rear Rack Pack



Li 1 is a state of the art rear rack lithium battery pack. It weighs just 5lbs (2.3kg) and it delivers 417Wh of energy (36V, 11.6Ah). The packs use Lithium Ion Rechargeable battery cells from Panasonic. Operating temperature of the pack is 0 - 45°C (Standard Charge) or 10 - 45°C (Quick Charge). Packs can be used from -20 - 60°C (Standard Discharge) or stored from -20 - 50°C (1 week), or -20 - 45°C (1 month), -20 - 40°C (6 months), and -20 - 35°C (1 year).

DIMENSIONS



40 Li-Ion Cells//
Light Weight ~ 5 lbs. //
High Efficiency ~ 90% //
High Energy ~ 417Wh //
High Capacity ~ 11.6Ah //
Internal Impedance < 250mOhms//
Cel Balancing//
Over-discharge protection//
Peak Discharge Current ~ 30A//
Cycle Life > 500 Cycles//
Wide Temperature Operation ~ -20 to 60°C (-4 to 140°F)//
High Reliability //
Intelligent Regen Interface //
Precise Power and Current Measurement //
High Speed Micro-Controller //

- ✓ Light Weight
- ✓ Fast Charging
- ✓ High Energy
- ✓ Extremely Safe
- ✓ Long Life



State of Charge Indicator

Charging Port

Battery Output

On/Off Switch

Hardened Case



Li 3 - 36V, 400Wh, 11.6Ah

Down Tube Pack



Li 3 is a state of the art downtube lithium battery pack. It weighs just 5lbs (2.3kg) and it delivers 417Wh of energy (36V, 11.6Ah). The packs use Lithium Ion Rechargeable battery cells from Panasonic. Operating temperature of the pack is 0 - 45°C (Standard Charge) or 10 - 45°C (Quick Charge). Packs can be used from -20 - 60°C (Standard Discharge) or stored from -20 - 50°C (1 week), or -20 - 45°C (1 month), or -20 - 40°C (6 months), or -20 - 35°C (1 year).

DIMENSIONS



40 Li-Ion Cells//
Light Weight ~ 5 lbs. //
High Efficiency ~ 90% //
High Energy ~ 417Wh //
High Capacity ~ 11.6Ah //
Internal Impedance < 250mOhms//
Cel Balancing//
Over-discharge protection//
Peak Discharge Current ~ 30A//
Cycle Life > 500 Cycles//
Wide Temperature Operation ~ -20 to 60°C (-4 to 140°F)//
High Reliability //
Intelligent Regen Interface //
Precise Power and Current Measurement //
High Speed Micro-Controller //



State of Charge Indicator

Charging Port

On/Off Switch

Aluminum Case

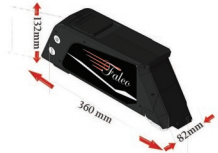


Li 7 - 48V, 672Wh, 14Ah

Downtube

Li 7 is a state of the art downtube lithium battery pack. It weighs just 7.7lbs (3.5kg) and it delivers 672 Wh of energy (48V, 14Ah). The packs use Lithium Ion Rechargeable battery cells from Panasonic. Operating temperature of the pack is 0 - 45°C (Standard Charge) or 10 - 45°C (Quick Charge). Packs can be used from -20 - 60°C (Standard Discharge) or stored from -20 - 50°C (1 week), -20 - 45°C (1 month), -20 - 40°C (6 months), and -20 - 35°C (1 year).

DIMENSIONS



52 Li-Ion Cells//
Light Weight ~ 7.7 lbs. //
High Energy ~ 672Wh //
High Capacity ~ 14Ah //
Internal Impedance < 250mOhms//
Cel Balancing//
Over-discharge protection//
Peak Discharge Current ~ 40A//
Cycle Life > 500 Cycles//
Wide Temperature Operation ~ -20 to 60°C (-4 to 140°F)//
High Reliability //
Intelligent Regen Interface //
Precise Power and Current Measurement //
High Speed Micro-Controller //

Hardened Case

USB Port

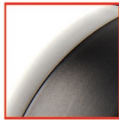
State of Charge
Indicator

Charging Port

On/Off Switch

Key Lock

Battery Cradle



Li 9 - 48V, 672Wh, 14Ah

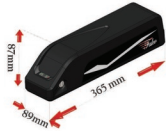
Downtube



Li 9 is a state of the art downtube lithium battery pack. It weighs just 7.7lbs (3.5kg) and it delivers 672 Wh of energy (48V, 14Ah). The packs use Lithium Ion Rechargeable battery cells from Panasonic. Operating temperature of the pack is 0 - 45°C (Standard Charge) or 10 - 45°C (Quick Charge). Packs can be used from -20 - 60°C (Standard Discharge) or stored from -20 - 50°C (1 week), or -20 - 45°C (1 month), or -20 - 40°C (6 months), or -20 - 35°C (1 year).



52 Li-Ion Cells//
Light Weight ~ 7.7 lbs. //
High Energy ~ 672Wh //
High Capacity ~ 14Ah //
Internal Impedance < 250mOhms//
Cel Balancing//
Over-discharge protection//
Peak Discharge Current ~ 40A//
Cycle Life > 500 Cycles//
Wide Temperature Operation ~ -20 to 60°C (-4 to 140°F)//
High Reliability //
Intelligent Regen Interface //
Precise Power and Current Measurement //
High Speed Micro-Controller //



Hardened Case

Charging Port



Battery Cradle

On/Off Switch

State of Charge Indicator

Key Lock

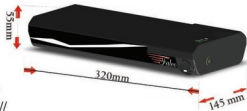
Li II - 500Wh, 10.5Ah

Rear Rack Pack



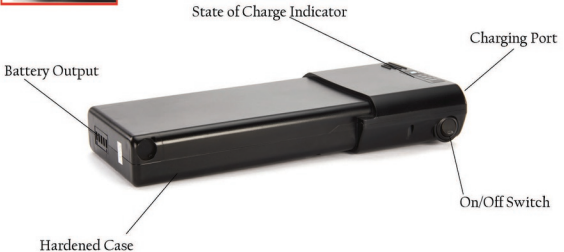
Li II is a state of the art rear rack lithium battery pack. It weighs just 8lbs (3.5kg) and it delivers 500Wh of energy (48V, 10.4Ah). The packs use Lithium Ion Rechargeable battery cells from Panasonic. Operating temperature of the pack is 0 - 45°C (Standard Charge) or 10 - 45°C (Quick Charge). Packs can be used from -20 - 60°C (Standard Discharge) or stored from -20 - 50°C (1 week), or -20 - 45°C (1 month), -20 - 40°C (6 months), and -20 - 35°C (1 year).

DIMENSIONS



52 Li-Ion Cells//
Light Weight ~ 8 lbs. //
High Efficiency ~ 90% //
High Energy ~ 500Wh //
High Capacity ~ 10.5Ah //
Internal Impedance < 250mOhms//
Cel Balancing//
Over-discharge protection//
Peak Discharge Current ~ 30A//
Cycle Life > 500 Cycles//
Wide Temperature Operation ~ -20 to 60°C (-4 to 140°F)//
High Reliability //
Intelligent Regen Interface //
Precise Power and Current Measurement //
High Speed Micro-Controller //

- ✓ Light Weight
- ✓ Fast Charging
- ✓ High Energy
- ✓ Extremely Safe
- ✓ Long Life



e5.1
\$1895



Speed: 20mph, 28mph, Off Road
Range: 60+ Miles
Weight: 18 lbs
Battery Type: Lithium Ion
36V, 417Wh, Rear Rack
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

e5.3
\$1895



Speed: 20mph, 28mph, Off Road
Range: 60+ Miles
Weight: 18 lbs
Battery Type: Lithium Ion
36V, 417Wh, Rear Rack
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

e5.7
\$2195



Speed: 20mph, 28mph, Off Road
Range: 80+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 672Wh, Downtube
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018 2019/

e5.9
\$2195



Speed: 20mph, 28mph, Off Road
Range: 80+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 672Wh, Downtube
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

e5.11

\$2195



Speed: 20mph, 28mph, Off Road
Range: 70+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 500Wh, Rear Rack
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019/

e5.1

\$1695

SIMPLICITY



Speed: 20mph, 28mph, Off Road
Range: 40+ Miles
Weight: 18 lbs
Battery Type: Lithium Ion
36V, 417Wh, Rear Rack
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

e5.3

\$1695

SIMPLICITY



Speed: 20mph, 28mph, Off Road
Range: 40+ Miles
Weight: 18 lbs
Battery Type: Lithium Ion
36V, 417Wh, Rear Rack
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

e5.7

\$1995

SIMPLICITY



Speed: 20mph, 28mph, Off Road
Range: 80+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 672Wh, Downtube
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

e5.9

\$1995

SIMPLICITY



Speed: 20mph, 28mph, Off Road
Range: 70+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 672Wh, Downtube
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018 2019

e5.11

\$1995

SIMPLICITY



Speed: 20mph, 28mph, Off Road
Range: 70+ Miles
Weight: 18 lbs
Battery Type: Lithium Ion
48V, 500Wh, Rear Rack
Motor: 500+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

f7.7

\$2295



Speed: 20mph, 28mph, Off Road
Range: 80+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 672Wh, Downtube
Motor: 750+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018 2019

f7.9

\$2295



Speed: 20mph, 28mph, Off Road
Range: 80+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 672Wh, Downtube
Motor: 750+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

f7.11
\$2295



Speed: 20mph, 28mph, Off Road
Range: 70+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 500Wh, Rear Rack
Motor: 750+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018 /2019

f7.7
\$2095
SIMPLICITY



Speed: 20mph, 28mph, Off Road
Range: 80+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 672Wh, Downtube
Motor: 750+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018 2019

f7.9
\$2095
SIMPLICITY



Speed: 20mph, 28mph, Off Road
Range: 80+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 672Wh, Downtube
Motor: 750+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019

f7.11
\$2095
SIMPLICITY



Speed: 20mph, 28mph, Off Road
Range: 70+ Miles
Weight: 21 lbs
Battery Type: Lithium Ion
48V, 500Wh, Rear Rack
Motor: 750+
Drivetrain: up to 11-Speed Cassette
Brake: Disc or Rim Compatible
Built-In Speed and Torque Sensor
Model 2018/2019



Industry's 1st eBike Wireless Console

Hxd+

Wireless Console
Not Included with Simplicity Systems



Junction Box

This can be used to power the wireless console directly from the motor



Thumb Throttle

Use this for Power On Demand. Included with most systems



Wireless Module

This is required for wireless communication. Included with all the systems



Wired Plus Minus - All in One WPM-AIO

The Wired Plus Minus can be used to directly control the level of assistance and regeneration of the motor without requiring a LCD display
Included with Simplicity Systems



Y-Cable for 4-Pin



4-pin extension cables - Available in 12" Increments



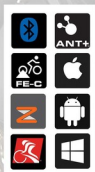
Power Cable Extensions - Available in 15" Increments



6-pin extension cables - Available in 12" Increments

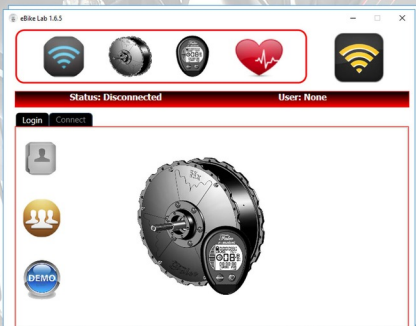


Trouble Shooter - A Diagnostic Tool to troubleshoot the Hx Motors



Falco Flash Apps
(Available for Smart Phones)

Control
Evaluate
Modify
Diagnose



eBike Lab Technology
(Available for Desktops)

Meet the World's First **Indoor/ Outdoor** eDrive



Falco Virtual Reality Integration



Meet the World's First **Indoor/ Outdoor** eDrive



Our products enable healthy living, reduce carbon emissions and, change the mode of transportation, in particular in urban areas. Our eBike systems provide solutions to road congestion, a growing challenge around the world. We remain committed to working aggressively on solutions for alternative mobility and carbon-neutral lifestyle.

ELEVATE THE RIDE.

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