



RipCurrent S Step-Through

Image



Overview

The go-anywhere, do-everything e-bike! Our most versatile fat-tire electric bike, the new **RipCurrent S Step-Through** is loaded with super premium components, a massive 52V 19.2Ah battery, and a versatile open frame for safe, fast and convenient mounting and dismounting.

Key Features
Overview

- 750 W Bafang Geared Hub Motor
- 28 MPH Top Speed / Class 3
- 20 MPH Top Speed Throttle Only Performance
- 52 Volts Advanced Battery System
- 19.2 Ah (995 Wh) Hyper Extended Range Battery
- 995 Wh Capacity
- 25 Amp Peak Controller (1,300W Peak)
- Race Track Mode Setting
- Tektro Hydraulic Disc Brakes LCD Advanced Matrix Display
- 20" x 4.0" Kenda or CST Off-Road Tires
- Torque and Cadence Pedal Sensor
- Thumb Throttle Included
- 9 Speed Shimano Cassette Transmission
- LED Front and Rear Lights
- Rear Rack and Fenders Included
- Ergonomic Grips

Color Options	Beach Blue Arctic White Yellow Black
Frame Sizes	One Size - Step Thru Frame Seat Tube Measurement: 16.5" (41.9 cm)

Motor	750 Watts / Bafang 1,300 Watts peak power @ 25A 80 Nm Peak torque 5:1 Geared hub motor for higher torque output 290 RPM Super high speed winding Low-drag freewheeling clutch Shimano cassette standard
Battery Pack	552V / 19.2 Ah Hyper Extended Range Battery 52 Volts system (14S6P Configuration) 995 Wh Capacity LG Chem (Korea) 45 Amp high rate BMS 84 Cells / 18650 Type Custom designed wide format inclosure Lockable and removable from the bike On-bike and off-bike charging capable 8 Amp charge capable 3-Pin XLR Charge Port Dual fuse setup IP 67 Illuminated power button 3C Discharge rating 600 Charge cycles to 60%
Controller	9 Transistor / 25 Amp Peak Sine wave FOC Customized tuning algorithm Thermally managed 52V LED light output Overboost function Fully potted resistant construction Cruise control function Walk function XT60 connectors Firmware upgradable
Performance	Default Configuration: Class 2 E-Bike 20mph (32 km/h) Class Capable: 28 mph (45 km/h) Optional Configuration: Class 3 and Class 1 E-Bike Optional Configuration: Race Track Mode: 30 mph in Pedal Assist *Configurations can be adjusted from the LCD display
Throttle Control	Thumb Throttle (included) Right or left side mountable Throttle set to 20 mph per e-bike regulations

<p>Pedal Sensors</p>	<p>Advanced Torque and Cadence Dual Sensor</p> <p>Torque sensor (included) Rear Drop-out frame-mounted strain gauge 1,000 samples per second</p> <p>Cadence sensor (included) 104 poles per crank revolution (maximum) Digitally filtered output</p> <p>Controller Software Athletically tuned assist software using the torque sensor, cadence sensor, speed measurement, voltage and controller temperature to modulate motor output. Intelligent pedal assist and throttle blending algorithms.</p>
<p>Display Interface</p>	<p>LCD Matrix Display Matrix Display with 120 x 64 Pixels Customized interface with 3-button layout 7 Levels assist: 0, ECO, 1, 2, 3, SPORT (28 mph), RACE (Unlimited) Basic and Advanced display modes Water resistant IP65 Backlit illuminated display 5 Pin quick-connect cable with brass lock-ring Push button start up</p>
<p>Advanced Display Screen Mode</p>	<p>Toggle Advanced Display Mode to see following real-time metrics:</p> <p>Speed Trip Distance Volts Wh/mi Efficiency Amps Watts Controller Temperature Odometer Amp-Hours Watt-Hours Assist Level Setting</p> <p>*Hold Assist Up + Power button for 2 seconds to toggle Advanced Display Mode. **Hold Assist Down + Power Button for 2 seconds to reset Trip Counter</p>

Assist System's Functions

Throttle-Assist Boost

Instantly add up to 1,295 Watts (25 Amps) of boost when pedaling and simultaneously holding down the throttle. TAB available in any assist setting from 0 mph up to 20 mph.

Active Cruise Control Function

Locks in any speed below 20 mph. Speed will be maintained without pedaling or using the throttle until: the brake is applied, pushing any button or giving additional throttle input. Pedaling can increase the speed, but e-bike will return to the pre-set speed if pedaling stops.

Walk Function

Push-button throttle limited to 6 kmh to assist when pushing or walking bike.

LED Headlight Control

Turn on the LED headlight light from the display console. Option to allow the headlight to always stay on.

Display Backlight Control

Turn on the display's backlight to see the screen at night. Option to allow the headlight to always stay on.

Torque Sensor Deactivation Function

Turn off the torque sensor signal. The pedal assist will only use the cadence sensor input.

Speed Limiter

Set the maximum speed limit of the throttle or pedal assist system.

Assist Level Limiter

Set the maximum assist level that can be selected: ECO, 1, 2, 3, Sport or Race

Low Voltage Limiter

Set the lowest voltage allowed by the electric drive system. Used to control how deeply the battery is allowed to discharge.

Display Brightness level

Set the brightness level of the display

Wheel Circumference input

Set the precise wheel circumference in mm.

Race Track Mode

	<p>Pedal assist is set to the most aggressive setting. The bike is not electronically speed limited. The top speed will be limited only by the power available to the motor. Use this setting on non-public roads only.</p> <p>Power Off Delay</p> <p>Set the inactivity duration before the bike automatically turns off.</p>																																	
Charger	<p>52V / 2 Amps Standard charger (included)</p> <p>2 Amps max charge rate</p> <p>3 Pin XLR Connector</p> <p>UL Certified</p> <p>On-bike and off-bike charging</p> <p>52V / 4 Amps Turbo charger (optional)</p> <p>4 Amps max charge rate</p> <p>3 Pin XLR Connector</p> <p>UL Certified</p> <p>On-bike and off-bike charging</p> <p>52V / 8 Amps Advanced fast charger (optional)</p> <p>Grin Tech / Cycle Satiator</p> <p>8 Amp max charge rate</p> <p>3 Pin XLR connector</p> <p>UL Certified</p> <p>80% Charge setting</p> <p>Storage charge setting</p> <p>Fully programmable</p> <p>Water resistant</p> <p>On-bike and off bike charging</p>																																	
Range	<table><tr><th colspan="3">Range Estimation</th></tr><tr><td colspan="2">Amp-Hours (Ah)</td><td>15.0 Ah</td></tr><tr><td colspan="2">Volts (V)</td><td>51.8 V</td></tr><tr><td colspan="2">Watt-Hours (Wh)</td><td>777 Wh</td></tr><tr><th>Riding Style</th><th>Efficiency Wh / mi</th><th>Range Miles</th></tr><tr><td>Economy Riding</td><td>10 Wh/mi</td><td>78 Miles</td></tr><tr><td>Medium Speed Riding</td><td>15 Wh/mi</td><td>52 Miles</td></tr><tr><td>Fast Speed Riding</td><td>20 Wh/mi</td><td>39 Miles</td></tr><tr><td>Aggressive Riding</td><td>30 Wh/mi</td><td>26 Miles</td></tr><tr><td>Race Track Mode (above 28 mph)</td><td>35 Wh/mi</td><td>22 Miles</td></tr><tr><td colspan="3">Factors negatively impacting efficiency and range: Frequent starts and stops, Hills, Throttle-only riding, Lower tire pressures, Headwinds, Faster average speeds, Heavier Payloads, Increased aerodynamic drag</td></tr></table>	Range Estimation			Amp-Hours (Ah)		15.0 Ah	Volts (V)		51.8 V	Watt-Hours (Wh)		777 Wh	Riding Style	Efficiency Wh / mi	Range Miles	Economy Riding	10 Wh/mi	78 Miles	Medium Speed Riding	15 Wh/mi	52 Miles	Fast Speed Riding	20 Wh/mi	39 Miles	Aggressive Riding	30 Wh/mi	26 Miles	Race Track Mode (above 28 mph)	35 Wh/mi	22 Miles	Factors negatively impacting efficiency and range: Frequent starts and stops, Hills, Throttle-only riding, Lower tire pressures, Headwinds, Faster average speeds, Heavier Payloads, Increased aerodynamic drag		
Range Estimation																																		
Amp-Hours (Ah)		15.0 Ah																																
Volts (V)		51.8 V																																
Watt-Hours (Wh)		777 Wh																																
Riding Style	Efficiency Wh / mi	Range Miles																																
Economy Riding	10 Wh/mi	78 Miles																																
Medium Speed Riding	15 Wh/mi	52 Miles																																
Fast Speed Riding	20 Wh/mi	39 Miles																																
Aggressive Riding	30 Wh/mi	26 Miles																																
Race Track Mode (above 28 mph)	35 Wh/mi	22 Miles																																
Factors negatively impacting efficiency and range: Frequent starts and stops, Hills, Throttle-only riding, Lower tire pressures, Headwinds, Faster average speeds, Heavier Payloads, Increased aerodynamic drag																																		

Wire Harness	Wire harness 1-to-4 Quick connect cable Brass lock-ring Water resistant
Frame	6061 Aluminum Heat Treated Frame Integrated & removable down-tube battery Custom Designed Hidden cable channel system CNC battery compartment Integrated motor controller heat sink Hydroformed top tube Dual water bottle cage mount Rear pannier rack mount Fender stay mounts Dual kickstand mounts 275 lbs (120 kg) total payload rating
Rear Suspension	Hardtail Configuration
Wheels	Double walled aluminum alloy rim 36 Hole 19mm inner wheel width 12G / 13G brass grommets High pressure rim strip Flat Black
Spokes	Front: 12G Heavy Duty Stainless Black 243 mm Rear: 12G Heavy Duty Stainless Black 198 mm
Tires	Kenda Krusade K1188 26" x 4.0" 3mm Kenda Shield Puncture Protection Or CST C-1752 26" x 4.0" 3 mm Puncture Protection
Brakes	Tektro HD-E350 Hydraulic Disc Rotors: Front: 180 mm Rear: 180 mm Hose: Front: 900 Rear: 1,850 mm Pad: Low-noise organic compound E10.11 B01S Style
Transmission & Derailleur	Shimano Altus 9 Speed 11-32T Cassette Trigger shifter
Bottom Bracket	Neco B910 Axle Length: 164 BB Length: 100 mm Taper: English Square

Transmission Chain Ring	Pro Wheel 52T Aluminum CNC 170 mm Outside and Inside chain guide
Chain	KMC K99 BR Rust Buster 9 Speed Compatible 128 links
Pedals	Platform Pedals Wellgo B249DU Polymer bearing
Fork	Air Suspension Fork Hydraulic lockout 80 mm Travel 1-1/8 Threadless
Grips	Velo Ergonomic lock-on grips Clamp Diameter 22.2mm

Handlebar & Stem	Custom Designed Short Moto Handlebar Clamp: 31.8 mm clamp Stem: 28.6 mm (1-1/8 Threadless) Length: 40 mm
Seat Post & Seat	Selle Royal Lookin Gel Seat Post: Promax 31.6 mm seat post diameter Seat Post Clamp: Promax quick release seat post clamp
Mud Guard	Front and rear mud guards Included Flat black
LED HeadLight	Front LED Light (included) 1,050 Lum CREE 7 Watt 10-60V input Aluminum body design Powered by main battery Waterproof design IP69 Display controlled on/off function
LED Tail Light	Rear LED Light (included) Star Union Rear LED Taillight Blinking and steady mode Includes reflector Batteries included
Horn	Bell (included)

Rear Rack	Custom Designed Rack (included) Powder Coated Steel Pannier Rail Light Reflector holder 50 lb (25 kg) rack payload
Weight Limits	Bike Weight Limits: 275 lbs (125 kg) total payload rating Rack Weight Limits: 50 lb (25 kg) rack payload
Warranty	1 Year Limited Warranty
Weight	Bike Weight Limits: 275 lbs (125 kg) total payload rating Rack Weight Limits: 50 lb (25 kg) rack payload
Package	Fully Padded Shipping Box 58" x 14" x 35" 146 cm x 35 cm x 89 cm
Due to ongoing supply chain constraints in the e-bike market, components listed are subject to change without prior notification. All new components have been carefully tested and inspected to ensure they meet, and in most cases exceed the performance standard of the item we are replacing. R20210410-001	