

Panasonic



E-Bike Systems

Panasonic Cycle Technology

Products 2020

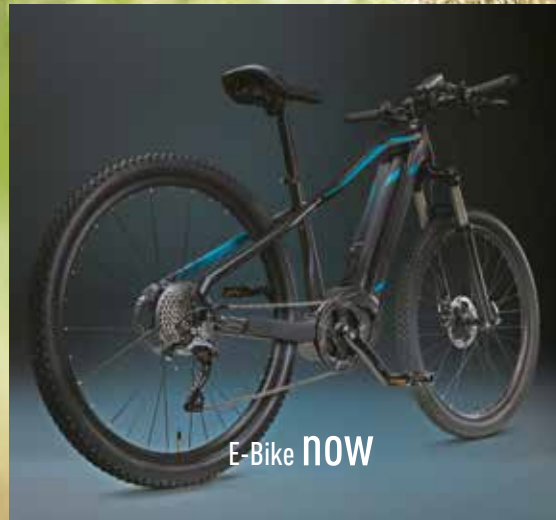
Ride our experience

Since Panasonic established the bicycle manufacturing company in 1952, we have concentrated on bicycle research, development, manufacturing and sales. We have combined our bicycle technology with the latest electrical power technology as part of our dedication on providing a more comfortable life. This pushes your experience of cycling to a whole new level.

Motor Units

Batteries

Display & Remote



E-Mountainbikes

The motor power offers everyone to climb even highest peaks. A constant and powerful support even on steep ramps gives every rider the feeling of success.

Motor Unit

GX Ultimate



90Nm



Approx.
2.95kg



E-Mountainbike
Trekking
S-Pedelec



To maximize the pleasure of riding an E-Mountainbike, the best in class motor with 90Nm offers more than enough power at inclines and on rough terrain. Due to the low weight of only about 2.95kg and its slim design, the **GX Ultimate** is the perfect choice for an E-Mountainbike.

Even at low cadence the motor unit provides strong power delivery constantly.

With 90Nm the **GX Ultimate** is one of the strongest motor units in its class and supports the driver even in the most demanding riding conditions.

Specifications

Torque:	90Nm
Weight:	Approx. 2.95kg*
Voltage:	36V
Output:	250W

*excluding spider arm and front chain ring

Optimized and compact design for enhanced ground clearance.
Also adaptable for S-Pedelecs on bike manufacturers' request.



Comfort- & Trekkingbikes

The great power delivery for the rider that needs more support - especially for demanding forest and gravel tracks. The **GX Power** motor unit offers a perfect package.

Motor Unit

GXPower



60Nm



Approx.
3.2kg



Comfort
Trekking
Urban



Specifications

Torque:	60Nm
Weight:	Approx. 3.2kg*
Voltage:	36V
Output:	250W

*excluding spider arm and front chain ring



The GX Power motor unit is also adaptable for bikes equipped with a coaster brake.

Urban- & Tourbikes

For all situations this motor unit offers perfect support. Whether comfortable or fast – the high efficiency provides pleasure on any kind of ride.

Motor Unit

X0



80Nm



Approx.
3.7kg



Urban
Tour



Comfortable and yet powerful if necessary – the **X0 motor** unit supports you even if your bike is fully loaded.

The **X0 motor** unit is also adaptable for bikes equipped with a coaster brake.

Specifications

Torque:	80Nm
Weight:	Approx. 3.7kg*
Voltage:	36V
Output:	250W

*including spider arm and excluding front chain ring



The torque for coaster brake models can be adjusted to 60Nm in order to ensure the functionality of the gear hub.

S-Pedelects

This motor unit equipped with an internal electric two-speed gear is perfectly suitable for S-Pedelects.

Multi Speed Assist System

X1



75Nm



Approx.
4.9kg



S-Pedelect

The **internal electric two-speed gear** with a smooth shifting mechanism allows a very efficient transmission. This ensures that the motor unit works at its optimum all the time.

Specifications

Torque:	75Nm
Weight:	Approx. 4.9kg*
Voltage:	36V
Max. Output:	640W**

* including spider arm and excluding front chain ring
** according to R85 measurement method

Internal electric two-speed gear, self-propelled drive available up to 20km/h

Display & Remote

Compact display with various information and functions:

- > Detachable display: Clock, Speedometer, Max. Speed, Average Speed, Odometer, Remaining Riding Distance, Riding Distance, Assist Mode, Assist Power Indication, IPX5, State of Battery Charge, 10 languages selectable, Gear Position (depending on pedelec)
- > A quick diagnosis of the E-Bike via the micro USB interface is possible at the dealer.

In addition to three assist modes HIGH, STANDARD and ECO, there is also AUTO mode. The AUTO mode provides the ideal power assist depending on the rider's input torque.



Assist modes:

- OFF:** The display shows all relevant data, no motor assist
- ECO:** Effective assist for long range riding
- STANDARD:** Default assist for any terrain
- AUTO:** Optimal motor assist depending on the rider's input torque
- HIGH:** Maximum motor assist



Operation button with motor shifter



Operation button



LCD Display



Every pedelec with a Panasonic E-Bike motor unit provides a walk assist up to 6 km/h.

Battery Designs

Lithium-ion technology from the very beginning: Panasonic produces the highest quality cells that has no memory effect in a sophisticated e-bikes design. The integrated battery management system with charge control protects the battery from over voltage, over current, deep discharge and short circuit.

Semi-Integrated Battery Design

Sleek, sporty design for highest frame stability

Specifications

Voltage:	36V	36V
Capacity:	8Ah	12Ah
Energy:	288Wh	432Wh
Weight:	Approx. 2.5kg	Approx. 3.4kg



Battery cell:

The cell type 20700 was developed for a compact design of the battery. It is the first time that these cells are being used for Semi-Integrated Batteries.

For longer storage (e.g. over the winter) the system can go into sleep mode to increase battery life.

Curved Upright Battery

This battery technology provides a high capacity as well as the highest quality and safety with an optimal design.

Specifications

Voltage:	36V
Capacity:	16Ah
Energy:	576Wh
Weight:	Approx. 4.3kg

Upright Battery

Available as spare parts

Specifications

Voltage:	36V	36V	36V
Capacity:	12Ah	15Ah	18Ah
Energy:	432Wh	540Wh	648Wh
Weight:	Approx. 3.2kg	Approx. 3.8kg	Approx. 4.4kg



Rear Carrier Battery for Comfort- & Trekkingbikes

Available as spare parts

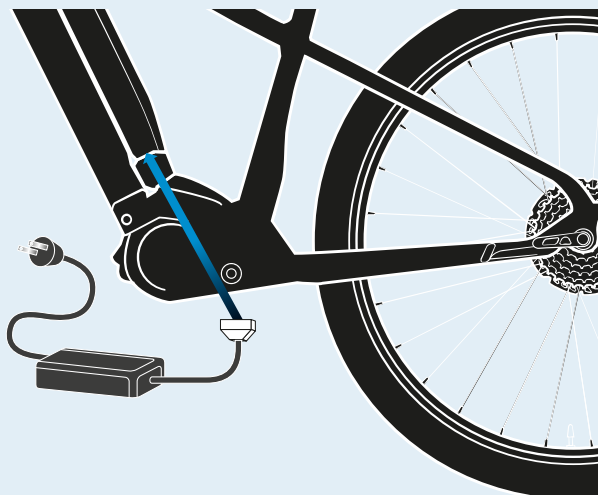
Specifications

Voltage:	36V	36V	36V	36V
Capacity:	6.6Ah	8.8Ah	11Ah	13.5Ah
Energy:	238Wh	317Wh	396Wh	486Wh
Weight:	Approx. 3.0kg	Approx. 3.2kg	Approx. 3.7kg	Approx. 4.0kg



Easy charging

Allows charging while the battery is still attached to the pedelecs.



Charger for SIB, Upright- and Rear Carrier-Batteries



Specifications

Battery charger for 36V batteries

Charging current: 4A

Weight: Approx. 820g

Dimensions:
(LxBxH) 180 x 90 x 48mm

Charging time:
(12Ah) Approx. 3.0h until 80%
Approx. 5.5h until 100%



Fully-Integrated Lithium-ion Battery

For optimum performance on long journeys: Since 2002 Panasonic has been using continuously enhanced Lithium-ion batteries for pedelecs. Different versions enable individual usage. GX Ultimate and GX Power motor units can be used with batteries from Trend Energy Technology Co.,Ltd., a part of SIMPLO TECHNOLOGY GROUP.

Specifications

TP-PCT (Main battery)

Battery type: Fully-Integrated, removable

Voltage:	36V	36V	36V
Capacity:	11.6Ah	14Ah	17.5Ah
Energy:	417Wh	504Wh	630Wh
Weight:	Approx. 3.3kg	Approx. 3.3kg	Approx. 3.8kg

Range Extender, removable

(in combination with TP-PCT Main battery)

Voltage:	36V
Capacity:	10Ah
Energy:	360Wh
Weight:	Approx. 2.3kg



Specifications

Battery charger for 36V SIMPLO batteries

Charging current:	2A	4A
Weight:	Approx. 690g	Approx. 950g
Dimensions: (L x B x H)	165.5 x 73.5 x 47.5mm	179 x 80 x 37.2mm
Charging time: (14Ah)	Approx. 4.5h until 80% Approx. 6.5h until 100%	Approx. 2.5h until 80% Approx. 3.5h until 100%



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Specifications are subject to change without notice.