



PW-X3: For the special Pure Ride experience.

Developed for off road riders who want thrilling performance with best-in-class technology, the compact and powerful PW-X3 is one of Yamaha's most successful drive units. Featuring the same exterior layout as the PW-XM and PWseries S2, the PW-X3 allows OEM manufacturers to adapt the same chassis for different segments.

PW-X3 is packed with advanced electronics that have been developed to deliver a special Yamaha Pure Ride experience. Zero Cadence Technology ensures that power delivery starts as soon as any pedal movement is detected – and Automatic Support Mode gives a natural and intuitive drive feeling at all speeds.

Producing 85 Nm, the lightweight PW-X3 is built to conquer extreme terrain – and with a 128mm ISIS bottom bracket axle, this narrow drive unit has the best Q factor in its class. With five assist modes – including EXPW for steady power at high cadence – the PW-X3 is a truly versatile drive unit.



- Instant power delivery at the slightest pedal input
- Weighs only 2.75kg –approx. 10% lighter and approx.20% smaller than the previous PW-X2 motor
- Improved walk-assistNarrow motor gives the best Q-factor

Pure Ride

Lighter, smaller with higher torque output than ever before, this next generation drive unit delivers instant response for outstanding off-road performance. The all-new PW-X3 is designed to deliver the purest ride and the most thrilling performance. With its lower weight, more compact size and higher torque output, the PW-X3 has the potential to open up many exciting new opportunities for e-MTB designers.

Developed specifically for the next generation of European e-MTBs, Yamaha's all-new PW-X3 drive unit is the company's smallest, lightest and most powerful drive unit. Producing higher performance with instant power delivery, the ultra-compact PW-X3 drive unit elevates the feeling of rider-machine unity to a whole new level – an experience that Yamaha calls "Pure Ride".

PW-X3's increased torque output of 85 Nm let's e-MTB riders tackle steep gradients and sandy or muddy terrain with ease. Just as importantly the PW-X3 ensures instant torque delivery at the slightest pedal input and the strong and seamless flow of power reinforces the feeling that the bike is an extension of the rider's body.



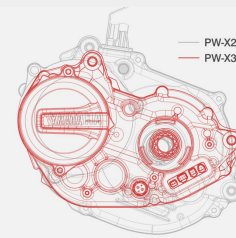
Increased torque

Producing maximum torque of 85 Nm, the PW-X3 is capable of tackling very demanding ascends. The distinctive Yamaha drive unit design enables instant support with sufficient torque immediately after pressure is applied to the pedal, not after certain crank turn.



Lighter than ever

Weighting just 2.75kg, the new PW-X3 is approximately 10% lighter than the previous model, giving an outstanding power to weight ratio for stronger performance and sharper handling.



More compact design

The new PW-X3 is approximately 20% smaller than the PW-X2 model, and its ultra-compact dimensions offer eBike manufacturers greater freedom to develop bikes for ideal frame geometry and suspension kinematics, as well as increased ground clearance.



Natural and agile response to pedaling

Right from the beginning, every PW-X series drive unit has featured the 128mm ISIS interface bottom bracket axle that gives the best Q-factor in any eBike system. Yamaha's Motor new PW-X3 continues with this idealized layout, making it especially attractive to riders.



Automatic Support Mode for E-MTB Ride

The PW-X3's exclusively tuned Automatic Support Mode delivers optimal assist different riding settings by choosing from Eco, Standard, and High-Performance Modes as conditions demand. The system reduces assist on level roads but boosts power on steep inclines to offer fine-grained assist feel that makes it seem like it's reading the rider's mind.

Drive Units	
Assist Modes	EXPW, HIGH, STD, ECO and +ECO
Max. Assisted Speed	25 km/h
Max. Torque	85 Nm
Rated output	250 W
Rated voltage	36 V
Weight	2.75 kg