GARMIN

Vector™ 2

Pedal-based cycling power meter

Pedal-based cycling power meter

Power is an objective measure of your cycling performance on any given day, independent of environmental conditions or how you feel. Using power meters like the Vector 2 and Vector 2S allows you to gauge your training intensity with unprecedented precision. Working seamlessly with a compatible Garmin device, it helps you train smarter.

The concept behind Vector is powerfully simple – measure your power output at the pedal, where force is applied. Vector measures the slight deflection of the pedal spindle through your entire pedal stroke, measuring the force vectors and using this data to calculate power.

Accurate and reliable

Unlike other power meters, Vector 2 measures power at the pedal, where force is applied. It's a direct-measurement power meter that delivers reliable, accurate data.

The single-sensing Vector 2S measures forces on the left pedal only, to approximate total power. On the dual-sensing Vector 2, the force sensors are housed in both pedals, so it can independently measure power from each leg and report total power as well as the balance between your right and left leg. The dual-sensing Vector 2 also provides access to advanced cycling dynamics data.

NEW: Pedal pods include an LED light to display important setup and maintenance information.

Easy to use

- Easy to transfer between bikes e.g. from training to race bike
- No need to purchase additional power meters for different bikes
- Easy to transport e.g. in your hand luggage
- Easy calibration in seconds

Easy to install

Vector 2 is easier to install than ever. Simply fit the pedal, tighten it, and attach the pedal pod afterwards.

Vector 2 / 2S come in two sizes to fit different cranks:

- 12-15mm in thickness, up to 44mm in width
- 15-18mm in thickness, up to 44mm in width

Specification	Vector™ 2S	Vector™ 2
Pedal weight	156g (left sensing pedal) 164g (right)	156g (left & right)
Pedal pod weight	23g	23g
Cleat and hardware weight	38g	38g
Total weight per pedal	179g (left sensing pedal) 164g (right)	179g
ANT+® compatible	•	•
Pedal compatibility	LOOK Kéo*	LOOK Kéo*
Accuracy watts measurement	+/-2%	+/-2%
Battery	175+ hours of active cycling User-replaceable CR2032	175+ hours of active cycling User-replaceable CR2032
Battery Type	CR2032	CR2032
Reported Data		
Power values	Current / 3s / 10s / 30s / Avg / Lap / Zone / Max / % FTP / Kj	Current / 3s / 10s / 30s / Avg / Lap / Zone / Max / % FTP / Kj
Watts per kg (current)	•	•
Cadence	Current / Ø / Lap	Current / Ø / Lap
Functional Threshold Power™ (FTP)[1]	•	•
Normalised Power™ (NP)[2]	Current / Lap / Last Lap / Total	Current / Lap / Last Lap / Total
Intensity Factor™ (IF)[3]	•	•
Training Stress Score™ (TSS)[4]	•	•
Torque Effectiveness	•	•
Platform Center Offset (PCO)		Current / Ø / Lap
Power Phase (PP)		Current / Ø / Lap Peak, Peak of the lap
Sitting / Standing		Total / per Lap
Balance (L/R)		Current / 3s / 10s / 30s / Avg / Lap
Pedal Smoothness		•

1, 2, 3, 4 on p. 11

*LOOK Kéo are the property of LOOK Cycle International.

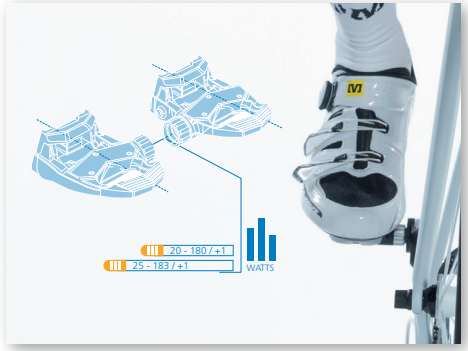
Train Smarter with Cycling Dynamics

Factors like fatigue, fitness, injury and recovery all affect the way you ride. Revolutionary new cycling dynamics lets you tailor your training around your specific weaknesses and strengths by showing you exactly where you're generating power throughout the pedal stroke.

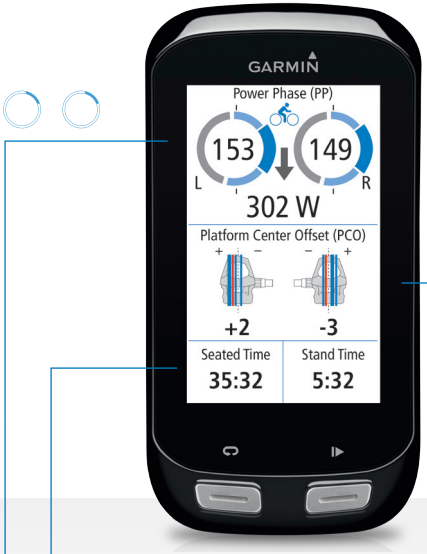
It also indicates where force is being applied on the pedal itself so you can ensure proper cleat position, as well as when and how long you were seated versus standing so you can gauge position effectiveness.

Why use Cycling Dynamics?

Cycling Dynamics enables the rider to capture, display, and analyse the data in order to support the exploration, development of new training, and fitting techniques.



Platform Center Offset helps you identify where force is being applied on each pedal. Use it to boost your efficiency and help prevent common injuries.



With **Power Phase** data, you'll see where you're producing power during each phase of your pedal stroke, where torque is concentrated, and develop strategies to streamline your stroke.

Standing vs. Seated Position. Vector 2 knows when and how long you were sat in the saddle or stood on the pedals. Using this data, you can determine which position is most effective for you during climbs and sprints.

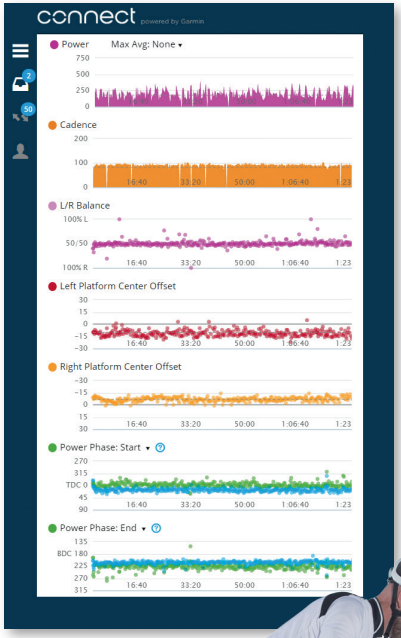
Garmin Connect™

With Garmin Connect, riders can plan, review, replay, relive and share all their training and racing, with new enhancements to support additional power-related data analysis and reporting.
www.garminconnect.com

- Detailed analysis
- Relive your rides
- Course creation
- Workout creation
- On-device segments
- Explore and download

Evaluation in Garmin Connect™

See a complete picture of your activities. View power metrics during post-ride analysis, then train smarter.



Garmin Connect™ Mobile App

You can access Garmin Connect on the go. Simply download the Garmin Connect Mobile App for iOS or Android.*

* List of compatible smartphones running at garmin.com/ble

Vector™ is ANT+® compatible with the following Garmin devices:


Edge® 500


Edge® 510*


Edge® 800


Edge® 810*


Edge® 1000*


Forerunner® 310XT


Forerunner® 910XT


Forerunner® 920XT*


fēnix® 3


epix™

Upgrade options for Vector™ customers

Vector 2S Upgrade Pedal
12-15 mm or 15-18 mm crank strength

To upgrade a Vector 2S to a full Vector 2 , for 12-15 mm or 15-18 mm crank strength.

Vector to Vector 2 Upgrade Kit
12-15 mm or 15-18 mm crank strength

To upgrade a Vector to a Vector 2, for 12-15 mm or 15-18 mm crank strength.

Vector S to Vector 2S Upgrade Kit
12-15 mm or 15-18 mm crank strength

To upgrade a Vector S to a Vector 2S, for 12-15 mm or 15-18 mm crank strength.

*Cycling Dynamics compatible.

Vector™ is compatible with the following manufacturers' cranks:

	Vector 12-15mm crank arm thickness	**Vector** 15-18mm crank arm thickness	Non-compatible cranks
Campagnolo	Super record Record Chorus Athena		Bora Ultra Bullet Ultra
Cannondale	Si SL SL2 PRO		
FSA	Gossamer Energy	K-Force Light SLK Light TrimaxAl	Metron
Rotor	3d+ FLOW		
Shimano	Dura Ace 7000 Dura Ace 9000 Ultegra 105		
Specialized		s-Works Carbon Pro Road	
SRAM	All models		

1) FTP – Functional Threshold Power™: FTP is a measurement that represents the highest power level one can maintain for one hour without growing fatigued.

2) NP – Normalised Power™: NP is a power averaging method, measured in watts, used to compensate for changes in ride conditions for a more accurate depiction of power expenditure.

3) IF – Intensity Factor™: IF is an indication of how hard or difficult a ride was in relation to your overall fitness. (IF = NP/FTP)

4) TSS – Training Stress Score™: TSS is a way of measuring how much stress is put on your body during a ride.

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garmin.com/vector

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