

iBike Pro Power Meter

By Fred Matheny



www.ibikesports.com

Price: \$399

Source: website, bike shops, catalogs

Size: 2.0 x 4.2 x 0.9 inches (5.1 x 10.7 x 2.3 cm)

Weight: 2.07 oz (58 g)

Features: 80 hours of data storage; ride analysis software; USB port adapter; compatible with PC or Mac; one-year warranty

RBR advertiser: no

How obtained: sample from company

Tested: 15 hours



[zoom!](#)

HOT!

- lowest-priced power meter
- accurate wattage
- easy to install and configure
- useful software
- can be switched from bike to bike

not!

- wattage readout may go blank on rough pavement
- can't be used on an indoor trainer
- requires accurate setup

Power monitoring has revolutionized training. Instead of guessing a ride's intensity, or inferring it from heart rate, we can now measure wattage output and use the information to monitor progress and plan future workouts.

The three most commonly used power meters (SRM, PowerTap and Ergomo) use strain gauges to measure power output directly. The iBike Pro takes a different approach. It calculates power from the exterior resistance on the cyclist, including wind, road gradient, speed and rider weight. The result is a relatively small power meter that's easily transferred from bike to bike. At a list price of \$399, it's considerably less expensive than the competition -- \$300 less than the base-model PowerTap, for example.

But we all know there's no free lunch, so I was skeptical of the iBike's ability to match a PowerTap in wattage accuracy. I mounted the iBike on my PowerTap-equipped bike and recorded the results of several rides on both power meters. Compared to the PowerTap, the iBike displayed a nearly identical average wattage. The difference between the units was usually less than 5 watts.

In addition, the iBike takes the place of a regular cyclecomputer. Basic functions include an odometer, current

speed, average speed, max speed, trip distance, trip time, total hours and time of day. You also get temperature, altitude, elevation gain, wind speed and calories in addition to other functions mentioned below. It features auto start/stop and can be set for English or metric units.

Power Be Gone

During the first several test rides, the iBike wasn't impressive. The power data vanished intermittently on rough roads. Because my area of western Colorado has mostly potholed and chip-sealed pavement, I was seeing power readings for less than half of each ride.

The company knew this could be a problem and even mentions it in the owner's manual. But apparently no user had reported as much display loss as I was experiencing. The iBike contains a sensitive accelerometer that was obviously overmatched by the chatter from my Colorado tarmac. What good is accuracy if the watts display is blank half the time?

A free firmware update from iBike solved the problem and enabled my test to continue. After I installed it, only the worst sections caused the power to stop recording. The bottom line is that the iBike isn't suitable for any bike ridden on consistently broken blacktop or washboard gravel, or for mountain bikes ridden off road.

One other drawback: Because the iBike doesn't measure power directly with strain gauges built into the rear hub (PowerTap) or crankset (SRM, Ergomo), it doesn't work on an indoor trainer. Although the SRM, PowerTap and Ergomo are much more expensive than the iBike, they can convert your bike into a lab-quality ergometer for indoor training and testing.

Simple Setup

The iBike is easy to install. It took longer than the 10 minutes the instructions promise but I was ready to ride in half an hour. All it took was mounting the unit on the handlebar and the wired wheel sensor on the fork; entering the combined weight of bike, rider and clothing; entering tire circumference; and performing a 30-second tilt adjustment. Then I took to the road to do a quick coast-down calibration.

It's important to be accurate. A small error in the tilt leads to wildly wrong wattage readings. When I purposely did the tilt calculation wrong, I got wattage readings 70-80 watts higher on the iBike compared to the PowerTap. Of course, I liked the iBike's power numbers better but knew they weren't correct. The tilt calibration is easy to get right.

The iBike is light and unobtrusive. The handlebar-mounted unit is about 2x4 inches. The red control ring is used to display five different data screens. You don't have to scroll to find the info you want; you click directly to it. The complete unit is listed at 58 grams. It's easy to move from one bike to another, but you need to reprogram weight and tire size. You can use any wheels unlike with a PowerTap, which has strain gauges in the rear hub and so requires a dedicated wheel.

Rich in Features

Because the iBike determines power in part by measuring slope angle, you can see the percent grade of the hill you're climbing displayed on the monitor. It also tells how much of your wattage is being used to overcome wind resistance. With a series of coast-down tests you can learn how aerodynamic your position is -- information formerly available only with expensive wind tunnel testing.

The iBike has other great features: ability to record intervals as "sub trips" and an "interval training" feature that prompts you to ride at a specific power level for a specific time. Interval sets can be programmed into the iBike and then performed on the road.

I also liked the display on my home computer's screen after I downloaded a ride. It was clear, easy to use and full of information about my performance. In addition, the iBike is compatible with CyclingPeaks ride analysis software.

The iBike website has a useful primer on training with power, written by Richard Wharton, a USA Cycling elite coach.

I wanted to do more testing but my roads became too snowy to ride. However, I'm confident enough in the iBike's performance after 15 hours of training that I'll continue to use it when the pavement clears. I'll post an

update if there are additional findings of consequence. In the meantime, I'm impressed. The iBike promises to be an accurate and relatively economical way to monitor power output along with other ride functions.

www.RoadBikeRider.com