

# Tech Briefs

## OpenSprints Offers Turnkey Solution for Winter

SALT LAKE CITY, UT—OpenSprints has developed a \$360 turnkey application for anyone wishing to host roller races this winter. “We originally started as an open source project inviting input from the community as we developed hardware and software to support roller racing. But most of the interest we have gotten is for the complete assembled system,” said Luke Orland, co-founder and hardware developer for OpenSprints.

All a retailer needs is a laptop to run OpenSprints software that collects and tabulates the data. The complete system includes magnets for the rollers and four roller sensors that tie to a main unit that links to a laptop with a USB cable. OpenSprints software can be downloaded from the company’s Web site. The software runs in Linux or Linux emulation windows on Apple or Windows computers. OpenSprints also offers a custom pair of Kreidler rollers with sensor magnets in place (\$995) and front fork mounts popular in GoldSprint racing. The rollers fold into a very compact size.



## MetriGear Collects Data from Pedal Spindles

SANTA CLARA, CA—Placing a strain gauge inside the spindle of a Speedplay pedal allows MetriGear to measure the force applied at the first point of human input into a bike. “All other force measurement systems are downstream measuring torque on various components. The advantage of our system is it can tell you so much more about the efficiency of your pedaling,” said Clark Foy, chief operating officer of MetriGear. “Not only can we provide right and left leg force contributions, we can also provide data on where in the pedal stroke you are strong or weak,” Foy said. The company is finalizing pricing, but is targeting \$1,000 for its system. It includes an adapted pair of Speedplay Zeros, X2 or Light Action pedals including spindle gauges, transmitter and battery carrier. The pedals/system can be swapped between training or TT bikes quickly. It’s ANT+ compliant so it works with any ANT head-unit like Garmin or Saris. The company hopes to release its consumer version next March, as well as a research version for universities and coaches. “This level of data has not been available before. We are measuring a rider’s force in a full 360 degrees as well as foot loading on the pedal. We are hoping research studies can isolate which of the data we are generating is useful for training,” Foy said.

## Phat Cycles Makes Two-Speed Fixed Gear Hub

HUNTINGTON BEACH, CA—The \$125 Trixie hub from Phat Cycles offers riders a choice of two fixed gears 32 percent apart that are selected with a friction shifter. “I was inspired by old Bendix and Sturmey hubs to develop this,” said Gary Hoisington, new product design and development manager for Phat Cycles. “The gear spread is perfect for commuters who can keep their flat-street gearing, but have something lower for overpasses and hills. And for guys doing stunts, it allows them a lower gear for slow-speed work,” Hoisington said. Hoisington worked hard to take the play out of the hub. He said there is less than a degree of play at the crank in either gear, so the hub feels fixed. “We had to optimize materials, heat treatment and keep the transition ramps to close tolerances to make it all happen,” he said. The hub is patent pending. The lack of play means there is less windup to slam into the hub from stunts, which improves reliability. The Trixie has an aluminum shell with steel internal gears and is drilled for 36 spokes. The hub’s specs are still being finalized, but the company hopes to offer the hubs to dealers before the end of the year.

