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# Does the world really need a tire gauge app? | RaceSense Review



By Tom Suddard

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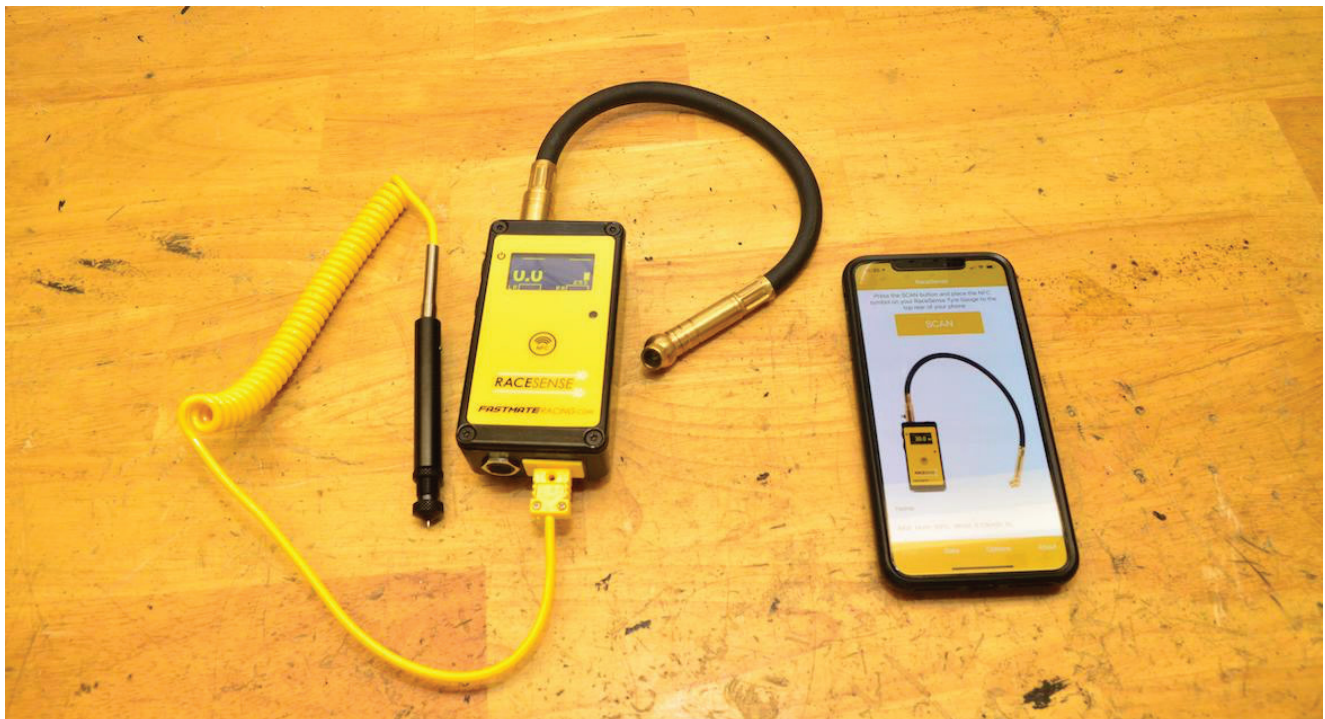
Are you leaving time and tires on the table by not taking your tire temps often enough at the track?

Admitting it is the first step on the road to recovery. Step two? The new **RaceSense Professional Tire Gauge with Pyrometer** , which cured our temperature ignorance as soon as we picked it up.



# What Is It?

Let's just say it: This is a \$449 tire gauge that pairs with an app on your phone, and HEY WAIT DON'T LEAVE THIS PAGE JUST YET.



We know, we know. It seems like every single product these days has an overpriced version that pointlessly talks to your phone so you can tell your friends it's "smart"—smart thermostats, smart fridges, smart ovens and, yes, smart tire gauges.

# The Temperature Dance

But there's a difference: This smart device isn't a gimmick. And to explain why, we need to rewind to the good old days, otherwise known as the last time that we went out on track.

Carefully tracking tire temperatures and pressures is one of the most important datasets you can generate when it comes to optimizing a race car. With this data and a record of the ambient conditions, you can use nothing more than simple alignment and pressure changes to drop full seconds from your lap times. You can also make every tire last longer by making adjustments for steady, even wear.

So it's no surprise that every professional team takes tire temperatures and pressures. Walk around any pro paddock and you'll see one crewmember with a pyrometer and a tire gauge sticking out of their back pocket.

Once each measurement is taken, it's scribbled down onto a slip of paper or yelled to a team scribe who does the scribbling. These slips of paper are then collected, paired with data about ambient conditions, and analyzed.

[200tw, 100tw, street-legal track and R-comps buyer's guide.]

One problem: We're terrible at doing this. Taking tire pressures and temps from our own race efforts is such a pain that we don't do it as often as we should. It requires juggling two devices that each require two hands to operate as well as a clipboard and a pen. And it requires doing it in a split second, since tires cool rapidly when they come off track.

## The Solution

That's where RaceSense comes in.

Sure, you can use it like a normal tire gauge and pyrometer: Touch it against the tire or against the valve stem and it shows a reading.

But that's not the reason we love it. After setting a few preferences, you can put the gauge into what we call "OMG! The car just came off track!" mode.

In this mode, the gauge walks you through taking the temperatures and pressures of every tire, recording and labeling every data point in real time.

So the dance with two tools, a pen and a clipboard is transformed into "LF outer, tap, middle, tap, inner, tap, RF..." Using this device, we can take every tire temperature and pressure on the car—that's 16 measurements—in less than 30 seconds.



What use is a black aluminum box full of numbers? That's where the app comes in: Tap the RaceSense with your NFC-enabled phone (it's the year 2021, your phone almost certainly has NFC), and all of the data is magically beamed into the free app and labeled with car number, time, location and ambient weather conditions. You can then add notes or more data as you wish.

This data can also be downloaded as a CSV file to any computer if you'd rather not store things in your phone. Plus, the gauge can even make some recommendations all by itself: We programmed our target hot tire pressures into the RaceSense, which meant it suggested adjustments every time we checked our pressures.

Our first 15 minutes with the gauge were frustrating for a simple reason: We didn't read the instructions. It's a fairly complicated tool managed with just a two-button interface. But after reading the instructions, we had it working perfectly. It's fairly intuitive once set up, but you should take time to configure it at the shop, not at the track.

## Is It Worth It?

But is it really worth the money? We think it is, and here's why: First, high-quality tire gauges aren't inexpensive. Longacre sells a competing product for \$499, and it doesn't pair with a phone or computer. Even an entry-level probe-type pyrometer and tire gauge set will total nearly \$200 in your shopping cart, so the RaceSense seems priced right for what it is.

Plus, this thing is built like a tank: It's heavy, has an extremely bright screen that we could easily read in direct sun, and claims to be weather-resistant. This is the kind of tool you could happily use as a hammer if you needed to.

Oh, and the rechargeable battery lasts for three months.

Sure, there are less expensive ways to collect this data. But just as we won't buy the cheapest 3/8-inch ratchet on the shelf, we'll probably never use that generic pyrometer again.

The **RaceSense** transformed our data on tires and ambient conditions: It used to be something we collected when we remembered, but now it's one of the most reliable data sets in our notebook. In fact, we proudly marked our name on the unit so it doesn't "accidentally" walk away during a race weekend.

If that's not a conclusion, we're not sure what is.

**The RaceSense Tire Gauge is currently available from HMS Motorsport for \$449.**