

## Re: RF Link

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eric781@gmail.com wrote:

> *Thanks for your ideas!*

Sorry I have been out of this whole thing. Working 60 hours a week does not leave much time for well, anything. About the RF and RFID.

The reason that the system uses RF as well as RFID is as follows:

If the system were to use simply just RF TX/RX to test for the presence of the rider, the transmitter as well as the receiver would need to constantly be using power. Unfortunately we do not have a lot of power to work with on the jacket.

The benefit of using the RFID, although expensive, I believe is worth it. With RFID you can sense for the presence of the rider without using any power on the jacket. We can accomplish this by placing the RFID tag in the jacket and the reader on the bike. The tag uses absolutely zero power. The only power that would be being used would be by the RF TX/RX sitting in idle or standby. The RF in standby uses drastically less power than when it is actually transmitting or receiving.

Another downside to just using RF is that with such significant power consumption you are limited as to how long you can wear the jacket and have the system functional until the battery needs to be recharged/replaced. This can cause the system to fail for riders going on rides of more than a couple of hours. This is a huge safety issue.

I hope this helps and I will try to keep up with the questions and will add anything I can. Thanks guys.