



RSE622



Application Note – Verification of DSRC link in Smart Tachograph

With its' rugged, light weight appearance and dual DSRC/ Bluetooth® interface, Q-Free RSE 622 is spot on to meet the new EC requirements for Tachograph installation, control, inspection and repair

Background:

After 10 years of helping to enforce the rules on driving-times and rest-periods, to monitor hours on the road to promote road safety, prevent fatigue and guarantee fair competition for drivers, the Digital Tachograph will become even smarter with the updated EC regulations. As the regulation EU No. 65/114 enters into force in March 2019, the Tachograph will have to comply with the following aspects;

- Improved security to further strengthen the protection towards fraud. In turn this will ease the administrative workload for the transport operators and induce major cost savings
- An interface with satellite navigation systems, Galileo and EGNOS
- A remote communication facility for police and enforcement agencies, capable of downloading specific Tachograph data from a moving vehicle
- An ITS (intelligent transport systems) interface able to link the Tachograph with other applications. For this purpose, DSRC is the defined communication technology

Use-case:

As part of the entry of the updated regulations, technical workshops are obliged to verify the DSRC link for Tachographs at first-time installation, annual control, inspections and by repair. Additionally, for truck manufacturers the Tachograph DSRC capability must be verified as part of the release procedures. With its' rugged, light weight appearance and DSRC/ Bluetooth® interface, is spot on to meet these requirements.

The workshop will typically apply a tool (tablet or other instrument) to administer the control of the respective Tachograph parameters. Due to its' Bluetooth® interface, the RSE622, with a purpose fit transaction model, can easily connect to this workshop tool.

Workflow:

The workflow of the Tachograph consists of 6 simple steps;

1. Turn on the RSE622
2. From the workshop tool application, detect the RSE622 and establish Bluetooth® connection
3. The DSRC test is triggered on the workshop tool software, Echo or full RTM (Remote Tachograph Monitoring) security test
4. The workshop tool software communicates with the RSE622 over Bluetooth® and initiates the selected test
5. The RSE622 sends the test results back to the workshop tool software
6. The workshop tool application displays the results

With its' high battery capacity the RSE622 can continue operation without recharging for 12 hours.

References:

1. RSE622 Datasheet: <https://www.q-free.com/product/rse622-handheld-dsrc-transceiver/>
2. JRC Technical report: [Proof of Concept, Smart Tachograph based on CEN DSRC](#)

