

RSE622 DSRC TRANSCEIVER

RUGGED, COMPACT HANDHELD DSRC TRANSCEIVER FOR ENFORCEMENT APPLICATIONS



OVERVIEW

The Q-Free RSE622 DSRC Transceiver is an advanced multi-protocol 5.8 GHz CEN-compliant handheld DSRC transceiver. It's portable, rugged, and compact form factor is optimized for enforcement applications in all weather conditions.

Automatically register, identify, and communicate with stationary vehicles equipped with any CEN compatible DSRC microwave communication tag.

It boasts ultra-low power consumption and a fast response time. The RSE622 is easy to use and operates on the internal battery for at least one working day with rapid recharge in less than 3 hours.

With a configurable "auto-read" function, it communicates with a host computer or a smart device through a Bluetooth connection. And it includes multiple human-machine interface (HMI) sources – LED, buzzer, and vibration.

It meets the most up-to-date EC requirements for Tachograph installation, control, inspection, and repair. With full standalone transaction model capability, the RSE622 also comes with a C++ client library and example code for easy integration.

BENEFITS

- Register, identify, and communicate with stationary vehicles equipped with DSRC communication tags
- Utilize in all weather conditions due to rugged design
- Operate up to 10 active hours or 24 standby hours
- Interface with smart devices using Bluetooth
- Support parking enforcement personnel in a variety of applications



OPERATE
THROUGHOUT
ENTIRE WORKDAY



MULTIPLE
HMI
SOURCES

FEATURES

EASY OPERATION

- Typically, 10 hours of active operation
- Standby operation for minimum 24 hours
- Maximum charging time 3 hours
- Activation of reader by lifting it to an upright position
- Configurable 'auto-read' function
- Easy pairing with Bluetooth devices

COMPLIANCE

- Full compliance with CEN TC 278 DSRC standards
- Bluetooth qualified design
- Backwards compatible with MD5859 protocol

MULTI-APPLICATION SUPPORT

- Supports multiple and custom applications (elements)
- EN 15509/SmartDSRC/PISTA/TIS/ST1-Chile/GSS/A1/OGS
- For standalone embedded applications, may also be equipped with a Secure Application Module (SAM) for secure DSRC key management

STANDARDS

CEN TC 278	EN 13372
DSRC:	EN 12253 Physical Layer
	EN 12975 Datalink Layer
	EN 12834 Application Layer
Safety:	EN 60950-1

HUMAN EXPOSURE

Electromagnetic radiation:	EN 50392:2004
Applications:	ISO 14906 / EN15509 EFC application
	ISO 17264 / EN 16312 ERI application
	ISO 13141:2015 LAC
	ISO 12813:2015 CCC
Compliance to EU directives:	R&TTE 1995/5/EC
	EMC 2004/108/EC
	LVD 2006/95/EC
	RoHS 2011/65/EU
	WEEE 2012/19/EU

TECHNICAL SPECIFICATIONS

Operating frequency:	5.7975, 5.8025, 5.8075, and 5.8125 GHz
Downlink bit rate:	500 kbps
Uplink bit rate:	250 kbps
Sub-carrier frequency:	1.5 MHz (profile 0)
Antenna polarization:	Left-hand circular
Maximum radiated power:	+21 dBm EIRP (SW adjustable)
Input voltage:	5V
Data communication:	Bluetooth 2.1 class B USB 2.0
Max power consumption:	<2.5W (@ max EIRP)
Power consumption (standby):	<0.5W
Communication distance:	2–3 m, 45° angled windscreen 3–4 m, vertical windscreen
Operating temperature:	- 20°C to +60°C (ambient)
Charging and storage temperature:	0°C to +45°C
Connector:	Micro-USB-B receptacle, waterproof
Material:	ABS plastic with shock-absorbing rubber
IP rating:	IEC 60529, class IP65
Color:	Black (RAL9004) and Red (RAL 3028)
Dimensions:	141 x 69 x 18 mm
Weight:	150 g



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