RSE624 POS DSRC TRANSCEIVER

- Small and lightweight CEN TC278 DSRC transceiver for point of sale/service (POS) use
- USB connection for power and communication
- Optimized for service, test and personalization applications
- Multiple HMI sources — LED, Buzzer
- Optimized near-field antenna for close range OBU reading

OVERVIEW

The Q-Free RSE624 CEN DSRC Transceiver is the smallest and most advanced multi-protocol 5.8GHz CEN DSRC transceiver. It is designed for automatic registration, testing and personalization of any CEN-compatible DSRC microwave communication tag.

The RSE624 is the optimal choice for a POS application where the RSE624 enables effective distribution, testing, and registration of OBU identity for service providers using DSRC On Board Units

The RSE624 is a product in the RSE62X series and shares the same protocol and application interfaces as RSE620 and RSE622. This enables easy migration between different products and shortens time to market for DSRC integrators.

The RSE624 is backwards compatible with earlier POS transceivers from Q-Free (MD5859T) and provides full standalone transaction model capability and comes with a C++ client library and example code for easy integration.

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FEATURES

- Ultra-low power and fast response time from standby mode
- Ultra slim design that fits on any desktop
- Supports all OBU sizes from any OBU vendor

COMPLIANCE

- Full compliance with CEN TC 278 DSRC standards
- Shares same interface protocols as RSE620 (park & access transceiver) and RSE622 (hand held transceiver)
- Backwards-compatible with MD5859 protocol
- Windows XP/2000 and newer

SIZE

- Smallest POS DSRC Transceiver on the market
- Low weight

EASE OF USE

- Configurable 'auto-read' function
- Single cable connection with power and communication
- Activation of built-in transaction models using Q-Free Remote Procedure Calls (QF-RPC)
- Special designed near-field antenna preventing accidentally OBU reading outside antenna area

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

TECHNICAL SPECIFICATIONS

Operating frequency:	5.7975 GHz	Material:	ABS plastic with shock-absorbing rubber
	5.8025 GHz	Color:	Black (RAL9004) and Red (RAL 3028)
	5.8075 GHz	**STANDARDS**	
	5.8125 GHz	CEN TC 278 DSRC:	EN 13372
Downlink bit rate:	500 kbps		EN 12253 Physical Layer
Uplink bit rate:	250 kbps		EN 12795 Datalink Layer
Sub-carrier frequency:	1.5 MHz (profile 0)		EN 12834 Application Layer
Antenna polarization:	Left-hand circular	Safety:	IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013
Maximum radiated power:	+5 dBm EIRP (SW Adjustable)		
Power:	Input voltage 5 V, 0.5 A (USB 2.0 compliant)	Test:	EN 300 674-2-1 (V1.1.1)
Data Communication:	USB 2.0		EN 301 489-03 (V1.6.1)
Max power consumption:	<2.5 W (@ max EIRP)		EN 301 489-01 (V1.9.2)
Communication distance:	0-10 cm	**HUMAN EXPOSURE**	
ENVIRONMENTAL CONDITIONS		Electromagnetic radiation:	EN50392:2004
Operating temperature:	-20 to +60 °C	Applications:	ISO 14906/EN15509 EFC application
Storage temperature:	-20 to +70 °C		ISO 17264/EN 16312 ERI application
Ambient Humidity:	5 to 95% (non condensing)		ISO 13141:2015 LAC
Connector:	Micro-USB-B receptacle, waterproof		ISO 12813:2015 CCC
Weight:	120 g	Compliance to EU directives:	RED 2014/53/EU
Size:	141 x 69 x 18 mm		EMC Directive 2014/30/EU
IP grade:	IEC 60529, class IP65		LVD Directive 2014/35/EU

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