

## 1. GENERAL INFORMATION

### 1.1. Product description of RDR416 / RDR417

The RDR417 is a high speed, low cost, multi-standard, multi-application USB contactless reader. It supports all current ISO dual interface / contactless cards and contactless paper tickets.

#### **Characteristics**

The RDR417 reader is based on CPL407 coupler platform.

#### **Features**

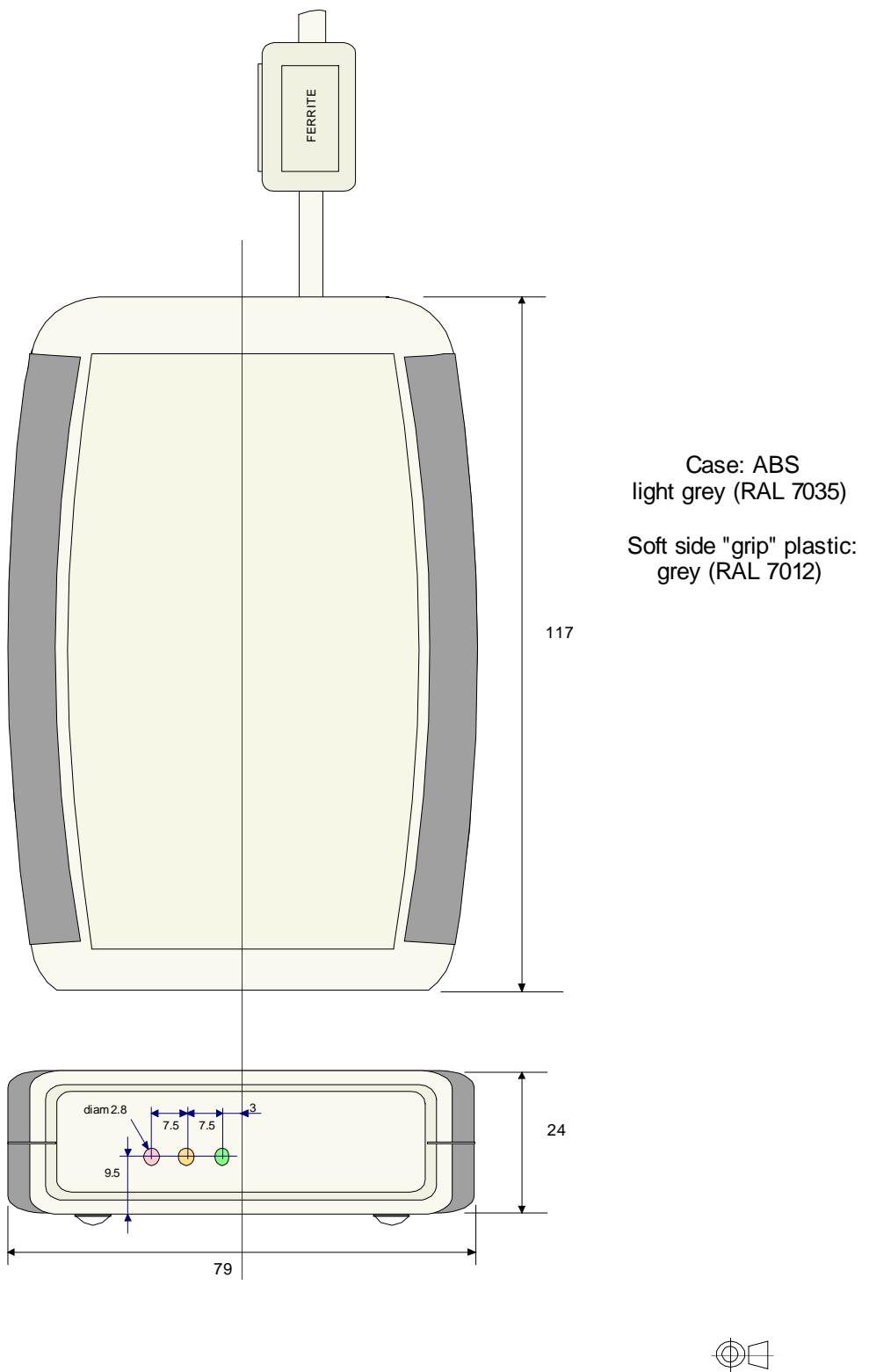
- ISO 14443 A/B - ISO 15693  
ISO/IEC 14443-2:2001/FPDAM 2 2004-03-17
- Contactless paper tickets
- High power class 1 RF interface
- Compatible with Windows 98 SE, Me, 2000, XP
- PC/SC driver, ASK (dll) proprietary driver, or virtual COM driver available
- High-speed communication: 106 Kb/s up to 847 Kb/s
- Cryptographic security management with embedded SAM slot + Mifare® asic
- USB 2.0 connection for PC-based applications
- Powered via USB port (500 mA port)
- CE Mark: EN300330, EN301 489-3, EN60950-1
- FCC Part 15, subpart C
- 3 control LEDs
- 178 mm x 125 mm x 26 mm
- Weight: 160 g
- Operating temperature: 0°C to 50°C

#### **Main applications**

- Identity
- Banking
- Logical / physical access control
- PC/ workstation add-on

#### **Cards & tags supported**

Mifare® standard, Mifare®4K, Mifare® Pro, Mifare Ultra Light, Mifare DESFIRE, Smart MX, SLE 55Rxx, SLE 66CL1605, SLE 66CLX320P, SR176, SRIX4K, Sharp B, all ASK cards and tickets. ICODE SLI.

**Mechanical aspects**

**Attached USB cable definition**

Mini-B-to-USB Type A  
 Length: 1m  
 Current: 1.0A  
 Contact resistance: 50mΩ max.  
 Over-Mold: Gray Polyvinyl Chloride, UL 94V-0  
 Ferrite: Wurth 7427114

**Adhesive cover film**

An adhesive cover film is added to the top case.  
 It supports ASK logo.  
 For volume order, it may be modified in order to support customer's logo.  
 Material is polycarbonate 250 µm, and adhesive 3M 468.

**1.2. Related Submittal(s) / Grant(s)**

All host equipment used in the test configuration are FCC granted, when relevant.

**1.3. Tested System Details**

The FCC IDs for all equipment, plus description of all cables used in the tested system are :

Trade Mark – Model Number (Serial number)	FCC ID	Description	Cable description
ASK – RDR417 (1) (Sn : 05520005)	QYERDR41X	USB contactless reader	USB cable, shielded with ferrite clip on reader side.
DELL Latitude D600 TAG: 9VH931J	E2K24CLNS	Personnel computer (Laptop)	Power cables unshielded. USB shielded
ASK – C.Ticket or samartcard ISO 14443-2-3 (Mode A and mode B) ISO 15693	None	Contactless paper ticket and smartcard	-
<b>(1): Equipment under test</b>			

**1.4. Test Methodology**

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-2003, FCC Part 15 Subpart C.

Radiated testing was performed at an antenna to EUT distance of 10 meters (F<30MHz) and 3m (F>30MHz). During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

**1.5. Test facility**

Tests have been performed on December 28<sup>th</sup> and 29<sup>th</sup>, 2005.

This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4-2003 in a letter dated July 14, 2005 (registration number 94821). This test facility has also been accredited by COFRAC (French accreditation authority for European union test lab accreditation organization) according to NF EN ISO/IEC 17025, accreditation number 1-1633 as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.