## HIRSCH

# uTrust 2500 R

Contact Smart Card Reader Module



## Application-ready CAC and PIV-approved reader module.

The uTrust 2500 R contact smart card reader module is designed for a wide range of embedded applications. Fully compliant with industry standards, including ISO/IEC 7816, USB CCID, PC/SC, and Microsoft WHQL, it seamlessly integrates with most contact smart cards and PC operating systems. Its EMV 2011 support ensures secure transactions for applications requiring enhanced data protection.

The module offers excellent performance with a compact design, featuring a high card data transmission rate of up to 600 kbps and TA1=97 support for fast transaction times. Ideal for embedded applications such as smart metering, vending machines, printers, payment devices, e-service kiosks, and high-security government use, the uTrust 2500 R ensures convenience. security, and reliability for daily use. With its robust compatibility and fast processing, it is a trusted solution for both commercial and high-security environments, providing efficient and secure smart card-based applications across various industries.

#### Convenient

- Ultra-compact and robust design
- Cables available in USB-A or USB-C; sold separately

#### **Supports All Applications**

• Supports ISO/IEC 7816 ID1 contact smart cards

#### **Fast and Convenient**

- Transaction time optimized for maximum end-user acceptance
- Ready-to-use driver support for all PC and MAC OS

### HIRSCH > DATA SHEET

### uTrust 2500 R

Parameter	Details
Supported Standards	ISO/IEC 7816 ID1, Class A/B/C support, T=0 , T=1 protocol EMV 2011 Ver 4.3 Level 1
Supported Smart Card Types	5V, 3V and 1.8V, ISO/IEC 7816 Class A/B/C
Smart Card Interface	ID1 8 pin sliding contact, Card present switch, C4/C8 support
Supported Tag ICs	All major ISO/IEC 7816 compliant Smart Card and Synchronous cards
Protocols	T=0, T=1, Synchronous cards I2C and 3-wire
Interface Speed	Up to 600 kbps; A1=97
Clock Frequency	ISO/IEC 7816 compliant; Operates up to 16 MHz
Power to Smart Card	60mA in Class A; 55mA in Class B; 35mA in Class C
Smart Card Detection	Card present switch, automatic power on/off, short circuit protection
Card Size	ID-1
Driver and Software	
PC/SC Driver	PC/SC Specification Ver. 2. 04. 14. for: Windows® 7/8/10/11 (32 and 64 bit), Windows® Server 2008/2012/2016/2019, WindowsXP, MacOS 10.9.x - 12.2.x, Linux 2.x, and 3.x, 4.x, 5.x (32 and 64 bit), Android 8.0 and higher
Software	PC/SC API, CT-API (through wrapper on top of PC/SC), M-Card API (through wrapper on top of PC/SC)
Operating Conditions	
Power & Communication	USB 2.0 Bus-powered
Power Consumption & Delivery	< 6mA, excluding smart card; 25 mA incl. smart card < 500µA in standby
Dimensions	36 x 22 x 6.5 mm
Weight	2.75 +/- 0.05g
Operating Temperature Range	0° to 50° C (32° to 122° F)
Storage Temperature Range	-20° to 60° C (-4° to 140° F)
Operating Humidity Range	Up to 95% RH non-condensing
Durability	100,000 card insertions
Connector	5-Pin Header connector; 2 mm pitch
Status Indicator	Dual-color LED: Green/yellow
Firmware In-Field Upgradeable	No

### uTrust 2500 R Continued

Parameter	Details
Certifications / Compliance	
Systems/Standards E	ISO/IEC7816, USB 2.0, CCID, Microsoft® WHQL
Regulatory/Environmental	CE, FCC, RoHS2, REACH, WEEE
Product Part Number	905369-2 113259R2R (cable usb-a) 114562R2R (cable usb-c)

We are committed to ensuring that all of our products are PFAS-free and that the minerals used are responsibly sourced. Through rigorous due diligence and adherence to industry standards, we strive to provide products that are safe, sustainable, and ethically produced.



TECHNICAL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE. REVISION DATE: 2025-05-15

Hirsch is a global technology leader, revolutionizing physical security solutions, video intelligence, and digital identification systems. Hirsch is part of the Vitaprotech Group. For more information, visit hirschsecure.com or email sales@hirschsecure.com.