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# uTrust 2500 R-EE

ISO/IEC7816 Reader/Writer Module with Enhanced ESD Protection



## Ideal module for industrial applications providing up to 16KV Electrostatic Discharge (ESD).

uTrust 2500 R-EE is the ideal design for a wide range of embedded applications. Providing full compliance with all major industry standards including ISO/IEC 7816, USB CCID, PC/SC, and Microsoft WHQL — uTrust 2500 R-EE works seamlessly with virtually all contact smart cards and PC operating systems. Enhanced ESD is designed for higher immunity, up to 16KV Electrostatic Discharge (ESD) along with conformal coating, making this the module of choice for industrial-grade applications. Full support and compliance to EMV 2011 expands daily use to very specific applications requiring additional security and data protection.

uTrust 2500 R-EE is the perfect mix of performance and compact design. The extended card data transmission rate of up to 600 kbps and the support of TA1=97 enables the shortest possible transaction time for maximum end-userconvenience.

Experience convenience, transactiontime efficiency, security, and reliability for embedded applications including smart metering, vending and dispensing machines, printers, payment devices, e-service, kiosks, and high-security use cases.

#### **Simple Integration**

- Ultra-compact, super robust and easy-to-integrate
- Performance-oriented design, streamlined for mobile operation
- Made for harsh ESD environments

#### **Reliable and Compliant**

- Industry and Government grade device with full support and compliance to EMV 2011
- 16kV ESD hardened device with extra Electro Static Discharge (ESD) protection circuitry
- Conformal coating to protect the board from adverse environmental conditions
- Supports all major smart card ICs and technologies in one device

#### Fast

• Transaction time optimized for maximum end-user acceptance

## uTrust 2500 R-EE

Parameter	Details
Contactless Interface	
Host Interfaces	USB 2.0 Full speed (12 Mbps)
Supported Standards	ISO/IEC 7816 Part 1 to 4, EMV 2011 Ver 4.3-Ready
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
Supported Smart Card Types	5V, 3V and 1.8V, ISO/IEC 7816 Class A/B/C
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
Contact Type	8 pin ID-1 sliding contact socket, C4/C8 support, Card detect switch
MTBF	100,000 hours
	Driver and Software
PC/SC Driver	PC/SC Specification Ver. 2.01.14 for: Windows® 7/8/10/11 (32 and 64 bit), Windows® Server 2008/2012/2016/2019, Windows® 6.0, 7.0, WindowsXP, MacOS 10.9.x - 12.1.x, Linux 2.6.x, and 3.x, 4.x, 5.x (32 and 64 bit), Android 4.0 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 Supply	USB Bus-powered
Power Consumption	<6mA excluding smart card; <20mA with standard card; <500µA in standby mode
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	SmartOS™
Firmware In-Field Upgradeable	No
	Certifications / Compliance
Systems/Standards	ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft WHQL
Regulatory/Environmental	CE, FCC, RoHS2, REACH, WEEE
	Ordering Information
Product Part Number	905583-1

### **IIPENTIV** DATA SHEET

TECHNICAL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE. REVISION DATE: 2022-03-25 Identiv (NASDAQ: INVE) is a global provider of physical security and secure identification. Identiv's products, software, systems, and services address the markets for physical and logical access control, video analytics and a wide range of RFID-enabled applications. For more information, visit identiv.com or email sales@identiv.com.

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