

# uTrust Contact Smart Card Reader Module Family

uTrust 2500 R and 2500 F



uTrust 2500 R



uTrust 2500 F

- **INTEGRATION**  
Compact and easy-to-integrate performance-oriented design
- **SUPPORTS ALL MAJOR APPLICATIONS**  
Supports all major smart card ICs and technologies in one device
- **FAST**  
Transaction time optimized for maximum end-user acceptance
- **CONVENIENT**  
Ultra-compact and robust design streamlined for mobile operation
- **SMARTOS™ POWERED**

Identiv's uTrust Smart Card Reader Module Contact Family (2500 R and 2500 F) 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 and 2500 F work seamlessly with virtually all contact smart cards and PC operating systems. Full support and compliance to EMV 2011 and GSA FIPS 201 expands daily use to very specific applications requiring additional security and data protection.

uTrust 2500 R and 2500 F represent the perfect mix of performance with 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-user convenience.

With uTrust 2500 R and 2500 F, the end user experiences convenience, transaction-time 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 for federal governments.

The Identiv SmartOS™ firmware in uTrust 2500 F is flexible and secures investments by supporting in-field upgrades through its onboard flash memory. It features easy and complete support for all major contact smart cards.

PARAMETER	UTRUST 2500 R / 2500 F
Host Interface	USB 2.0 Full speed (12 Mbps)
Supported Standards	<ul style="list-style-type: none"> <li>• ISO/IEC 7816 Part 1 to 4</li> <li>• EMV 2011 Ver 4.3 Level 1 (compliant)</li> </ul>
Supported Tag ICs	All major ISO/IEC 7816 compliant Smart Card and Synchronous cards
Smart Card Protocols	T=0, T=1, Synchronous cards I2C and 3-wire
Smart Card Interface Speed	<ul style="list-style-type: none"> <li>• Up to 600 kbps</li> <li>• TA1=97</li> </ul>
Smart Card Clock Frequency	ISO/IEC 7816 compliant; Operates up to 16 MHz for uTrust 2500 R and up to 12 MHz for uTrust 2500 F
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

PARAMETER	UTRUST 2500 R / 2500 F
Smart Card Detection	<ul style="list-style-type: none"> <li>• Card present switch</li> <li>• Automatic power on/off</li> <li>• Short circuit protection</li> </ul>
Card Size	ID-1
ID-1	<ul style="list-style-type: none"> <li>• 8 pin ID-1 Sliding Contact Socket</li> <li>• C4/C8 support</li> <li>• Card detect switch</li> </ul>
PC/SC Driver	PC/SC Specification Ver. 2.01.09 for: <ul style="list-style-type: none"> <li>• Windows® XP/Vista/7/8/10 (32 and 64 bit)</li> <li>• Windows® Server 2003/2008/2012</li> <li>• Windows® CE 6.0, 7.0</li> <li>• MacOS 10.5.x-10.15.x</li> <li>• Linux 2.4.x, 2.6.x, 3.x, 4.x, 5.x (32 and 64 bit)</li> <li>• Android 4.0 and higher</li> </ul>
Software	<ul style="list-style-type: none"> <li>• PC/SC API</li> <li>• CT-API (through wrapper on top of PC/SC)</li> <li>• M-Card API (through wrapper on top of PC/SC)</li> </ul>
Power Supply	Bus-powered USB
Power Consumption	<ul style="list-style-type: none"> <li>• uTrust 2500 R: &lt;6mA excluding smart card; &lt;20mA with standard card; &lt;500µA in standby mode</li> <li>• uTrust 2500 F: &lt;15mA excluding smart card; &lt;25mA with standard card; &lt;500µA in standby mode</li> </ul>
Dimensions	36 x 22 x 6.5 mm
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	Sliding contact 100,000 card insertions
MTBF	100,000 hours
Connector	5-Pin Header connector; 2 mm pitch
Status Indicator	Dual-color LED: Green/yellow
Firmware	SmartOS™
Firmware In-Field Upgradeable	<ul style="list-style-type: none"> <li>• uTrust 2500 R: No</li> <li>• uTrust 2500 F: Yes</li> </ul>
Systems/Standards	<ul style="list-style-type: none"> <li>• ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL</li> </ul>
Regulatory/Environmental	<ul style="list-style-type: none"> <li>• CE, FCC, RoHS2, REACH, WEEE</li> </ul>
Product Part Number	<ul style="list-style-type: none"> <li>• uTrust 2500 R: 905369-2</li> <li>• uTrust 2500 F: 905399-2</li> </ul>

Identiv, Inc. (NASDAQ: INVE) is the leading global player in physical security and secure identification. Identiv's products, software, systems, and services address the markets for physical and logical access control and a wide range of RFID-enabled applications. Customers in the government, enterprise, consumer, education, healthcare, and transportation sectors rely on Identiv's access and identification solutions. Identiv's mission is to secure the connected physical world: from perimeter to desktop access, and from the world of physical things to the Internet of Everything.

Identiv has offices worldwide. Addresses and phone numbers are listed at [identiv.com/contact](http://identiv.com/contact). For more information, visit [identiv.com](http://identiv.com) or email [sales@identiv.com](mailto:sales@identiv.com).

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