

uTrust 4511 F

Contactless Smart Card Reader/Writer Module with SAM Slot



Contactless 13.56 MHz, USB-CCID, ISO/IEC 14443, and NFC module features ISO/IEC 7816 SAM support.

This smart card reader/writer module is the ideal combination of contactless and NFC technologies protected by an optional SAM in a single device. Easy integration enables a short time to market for OEMs, system integrators, and VARs, building innovative solutions for contactless security, network log-on, secure web-based transactions, or NFC-based identification schemes.

The PC-linked reader module supports end-user environments where virtually all types of credentials are used, even in mixed credential populations. With its all-in-one concept, uTrust 4511 F enables a smooth transition

from well-established traditional technologies into emerging NFC applications, supporting new business opportunities. Featuring an onboard ID-000 sized SAM socket, uTrust 4511 conveniently adds extra security to most contactless applications. uTrust 4511 F helps drive end-user solution acceptance with convenience, transaction time efficiency, security, flexibility, and complete NFC capabilities.

Simple Integration

- Quick integration with full ISO/IEC 14443 support and ISO/IEC 7816 SAM

Convergence

- Secure contactless and NFC technologies enable use with mixed credential populations

Flexible and Fast

- Supports major card ICs, standards, and technologies
- Transaction time optimized with support of 848kB/s in ISO/IEC 14443 and 600kB/s in ISO/IEC 7816 for SAM and maximum end-user acceptance

Use Cases

- Network log-on
- Secure web based transactions
- NFC-based customer loyalty programs

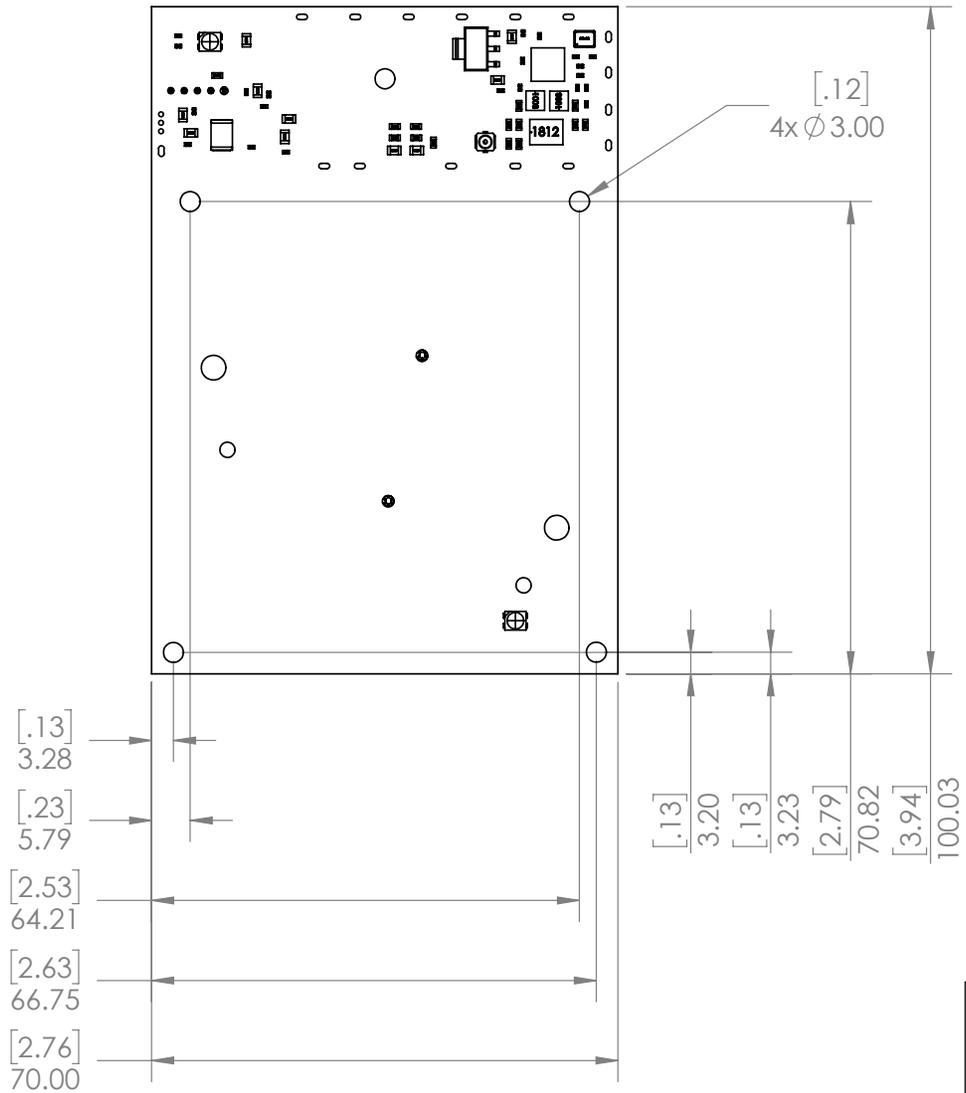
uTrust 4511 F

Parameter	Details
Host Interface	USB 2.0 CCID (USB 1.1/3.0 compliant)
Communication Speed	12 Mbps (USB 2.0 full speed)
Contact Smart Card Interface	
Supported Standards	ISO/IEC 7816 Part 1 to 4
Supported Tag ICs	All major ISO/IEC 7816 compliant smart card ICs supported
Protocols	T=0, T=1
Interface Speed	Up to 600 kB/s (depending on card); TA1=97
Clock Frequency	ISO/IEC 7816 compliant up to 5 MHz; operates up to 16 MHz
Supported Smart Card Types	ISO/IEC7816 voltage classes A/B/C (5V, 3.3V, 1.8V)
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-000 (Mini SIM card format 25 mm 15 mm)
Contact Type	8 pin ID-000 socket, C4/C8 support, Socket lock function, SAM detect switch
Contactless Interface	
Supported Standards	ISO/IEC 14443 A/B Part 1 - 4; ISO/IEC 18092
Protocols	T=CL
Supported Card Chips	MIFARE® Classic Family, MIFARE Ultralight Family, MIFARE Plus Family, MIFARE DESFire Family, FeliCa™, Calypso, CD21, NFC Forum Tag Types 1/2/3
Data Transfer Rate	106/212/424/848 kB/s (depending on card IC)
Reading Distance	Up to 70 mm (2.756 in), depending on card chip type and card antenna size
Antenna	Integrated
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, WindowsXP, MacOS 10.9.x - 12.2.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); MCARD API (through wrapper on top of PC/SC)
Operating Conditions	
Power Supply	USB Bus-powered
Power Consumption	<120 mA excluding smart SAM; <185 mA with smart SAM; <500 µA in standby mode
Dimensions	100 x 70 x 10 mm (3.937 x 2.756 x 0.394 in)
Weight	27 g (0.06 lb) ±5%
Operating Temperature Range	0° to 50° C (32° to 122° F)
Storage Temperature Range	-20° to 60° C (-4° to 140° F)

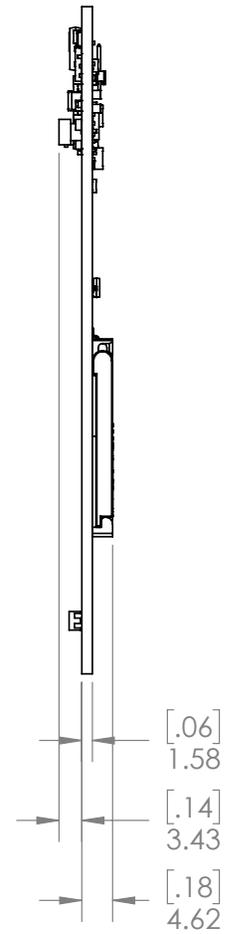
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Parameter	Details
Operating Humidity Range	Up to 95% RH non-condensing
Durability	Sliding contact 100,000 card insertions
MTBF	100,000 hours
Connector	5-pin Molex connector (2mm pitch)
Status Indicator	LED
Firmware In-field Upgradable	Yes
Certifications / Compliance	
Systems/Standards	ISO/IEC 7816, USB 2.0 full speed, CCID, Microsoft WHQL
Regulatory/Environmental	CE, UL94, RoHS2, REACH, FCC ready
Ordering Information	
Product Part Number	905565-2

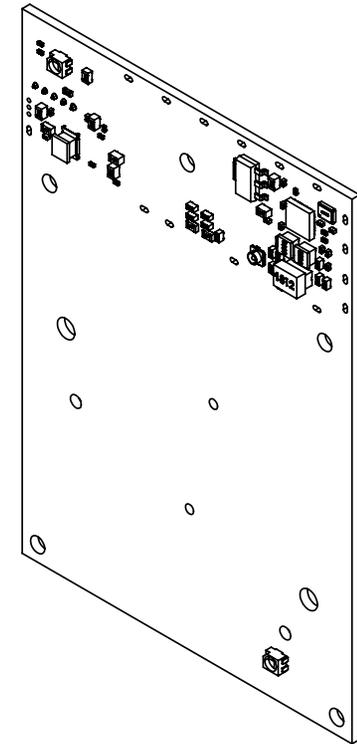
Top View



Right Side View



Isometric View



IDENTIV	1	02-Feb-2021	Initial Release
	REV.	DATE	Rev. History
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SCALE : 1:1	APPROVED BY :		DATE :
MATERIAL : xxxx	CHECKED BY : Sixus	DATE : 02-Feb-2021	Description: uTrust 45XX F R1.0
FINISHING : xxxx	DRAWN BY : Karthick	DATE : 02-Feb-2021	TITLE: uTrust 45XX F
3RD ANGLE PROJ		UNIT : [Inches]	PART NO. : TBD
		DRW NO. : TBD	REV. 1
		SIZE: A4	SHEET 1 OF 1