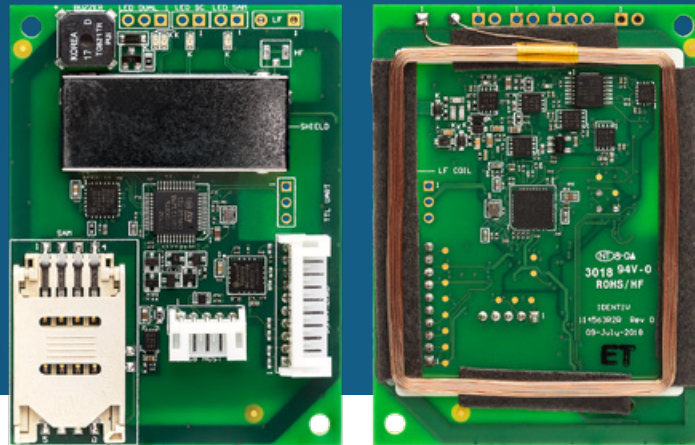




# uTrust 5501 F Series

125 KHz and 13.56 Mhz Multi-Technology  
Smart Card Reader/Writer Module



Combines contactless and leading-edge NFC technologies and is protected by an optional secure access module (SAM).

Identiv's uTrust 5501 F is available with an on board antenna or as a module compatible with an external antenna. 125KHz and 13.56 Mhz Multi-Technology Smart Card Reader/Writer Module combines contact and multi-frequency/multi-ISO contactless interface capabilities to support a wide variety of identification applications. The module supports contact smart card personalization (both synchronous and asynchronous), contactless high-frequency 13.56 MHz cards that are compatible with ISO14443, ISO15693, FeliCa, and contactless low-frequency cards that operate at 125 kHz.

uTrust 5501 F's optional Secure Access Module (SAM) slot provides enhanced application security via secure authentication, mutual

authentication, key management, and smart card cryptographic functions.

Secure communication with proprietary card technologies, such as iClass™, iClass Seos™, and more, are supported through onboard SAM.

The module's smart card header allows for an additional contact card slot for ID-1 or ID-000. This expands the capabilities of the module to read ID-1-sized contact cards or provide an additional SAM slot.

Identiv-powered SmartOS™ in-field upgradeable firmware makes uTrust 5501 Fa secure, forward-looking investment, providing both flexibility and fast time-to-market for new products and applications, as well as minimum risk linked to the evolution of technology standards.

## Multi-Technology

- Supports contact and contactless technology

## Multi-Frequency

- Supports 125 KHz and 13.56 MHz contactless cards

## Multi-Protocol

- ISO14443 A/B, ISO15693, NFC, MIFARE®, FeliCa™, and iClass/iClass Seos™ through SAM

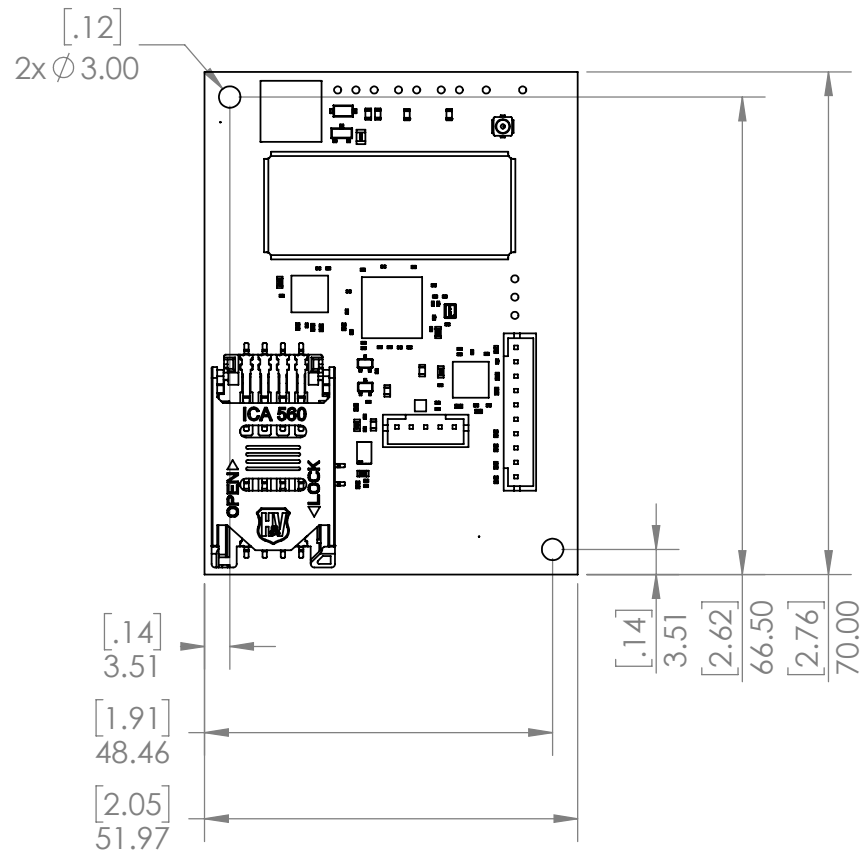
## Compact

- Small form factor for easy system integration

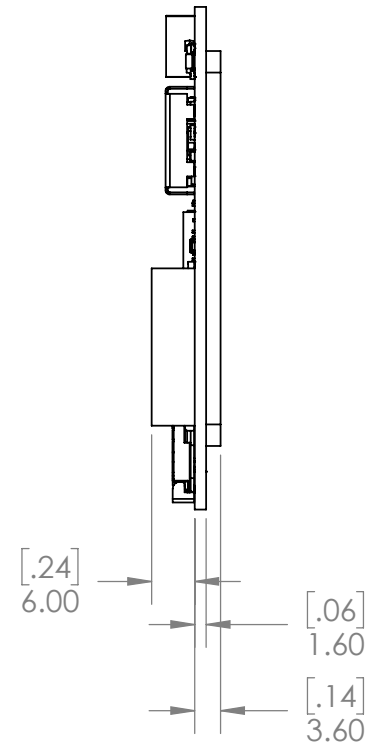
# uTrust 5501 F Series Specifications

Parameter	Details		
	uTrust 5501 (OBA)	EA	HF w/o SAM
Primary Interface	USB 2.0 CCID (USB 1.1/3.0 compliant), 12 Mbps (USB full speed)		
Supported Standards	ISO/IEC 7816 Part 1 to 4		
Supported ICs	All ISO/IEC 7816 compliant Smart Card ICs		
Smart Card Protocols	T=0, T=1		
Smart Card Interface Speed	Communication speed up to 600 kbps (PPS, FI parameter)		
Smart Card Clock Frequency	ISO/IEC 7816 compliant; Operates up to 16 MHz (PPS, DI parameter)		
Supported Smart Card Types	5V, 3V, and 1.8V; ISO 7816 smart card Class A, B, and C		
Contact Type	On board SAM slot; external slot (ID-1 or ID-000)		External Slot (ID-1 or ID-000)
Supported Contactless Standards	ISO 14443 A and B (13.56MHz) smart cards, ISO 15693, and 125KHz		ISO 14443 A and B (13.56MHz) smart cards, ISO 15693
Protocols	T=CL		
Supported Card Chips	MIFARE (Classic 1 K and 4K, DESFire, EV1, EV2, EV3, Ultralight, Ultralight C, PLUS, mini), FeLiCa (Lite and Secure), NFC (Type 1 - 5), Calypso cards, iClass through iClass SAM, and LF (ASK, FSK and PSK)		MIFARE (Classic 1 K and 4K, DESFire, Ultralight, Ultralight C, PLUS, mini, EV1 ), Felica (Lite and Secure), NFC (Type 1 - 5), Calypso cards
Data Transfer Rate	106/212/424/848 kB/s (depending on card IC)		
Operating Distance	Up to 2.5 cm depending on frequency		
Antenna	Integrated HF and LF antenna	Sold Separately	Integrated HF antenna
PC/SC Driver	PC/SC Specification Ver. 2.01 .14 for: Windows® 10 (32 and 64 Bit) with Device Guard support; Windows® Server 2012 I 2016; MacOS 1 0.12.x; Linux 3.x, 4.x		
Power Supply	USB bus-powered		
Dimensions	2. 75 x 2.00 x 0.32 in (subject to change)		
Weight	26 grams		
Status Indicator	Four (4) LEDs (review manual for more information)		
Firmware In-Field Upgradability	Yes		
Firmware	SmartOST™		
Operating Temperature Range	0° to 50°C (32° to 122°F)		
Operating Humidity Range	Up to 90% RH non-condensing		
Buzzer	Beeps upon card detection		
Standards	ISO/IEC 7816, ISO/IEC 14443, ISO/IEC 15693, USB 2.0 Full Speed, CCID, and Microsoft® WHQL		
Regulatory/Environmental	CE, FCC part 15 Subpart C, Certified as module, RoHS2, REACH, and WEEE		
Product Part Number	905567	905567-1	905567-3

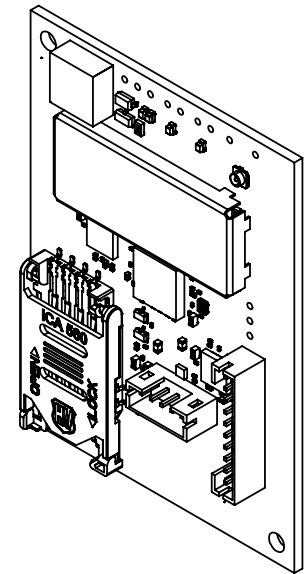
# Top View



# Right Side View



# Isometric View



	1	02-Feb-2021	Initial Release
	REV.	DATE	Rev. History
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SCALE : 1:1	APPROVED BY :		DATE :
MATERIAL : xxxx	CHECKED BY : Sixtus		DATE : 02-Feb-2021
FINISHING : xxxx	DRAWN BY : Karthick		DATE : 02-Feb-2021
		Description: uTrust 5501 F PCBA R0.1	TITLE: uTrust 5501 F
UNIT : [Inches]		PART NO. : TBD	REV. : 1
mm(Millimeter)		DRW NO. : TBD	SIZE : A4 SHEET 1 OF 1