

# Thales NFC Reader

Universal NFC reader for  
contactless smart card  
applications

[thalestct.com](http://thalestct.com)

**THALES**  
Building a future we can all trust

## Protecting executives

Cyber attack and identity theft continue to increase and become more sophisticated as organizations harness the power of online services for applications. To counteract this threat, many enterprises, financial institutions and government agencies have deployed strong authentication using smart card technology. Their goal is to provide safe logical access, protect digital identities and safeguard online transactions for employees and citizens at large.

### Benefits

- Data and identity protection
- Strong authentication
- Secure application for eGovernment, eBanking and ePayment, enterprise, access control, healthcare, gaming
- Easy deployment
- Universal for all ISO contactless smart cards
- Customizable

Contact and contactless smart card readers are an essential component of any strong authentication solution deployment addressing PKI, OTP or FIDO technologies. Connected to a PC, laptop or thin client, they ensure communication between the smart card and network services and must do so in a convenient yet secure manner. Thales's full range of PC-Link smart card readers provide the perfect balance of ease of use combined with the highest level of security.

### Main standard compliances

- ISO 14443 Type A & B Parts 1-4
- ISO 15693
- ISO 18092 NFC
- MIFARE® (T=CL)
- Microsoft® WHQL
- USB 2.0 (type A and C)
- RoHS, REACH and WEEE
- PC/SC, CCID
- IP67 waterproof and dustproof



### Reader Design

The TAA compliant Thales NFC reader is a robust device built on 13.56 MHz contactless technology. It operates with contactless cards and tokens adhering to ISO 14443 Type A and B, ISO 15693, and ISO 18092 standards. The IP67 rating signifies its exceptional resistance to dust and water, ensuring uninterrupted operation even under challenging conditions.

In compliance with both CCID and PC/SC standards, the Thales NFC reader offers high-speed communication of up to 848 kbps. Its firmware embeds upgradable features, extending its versatility and cost-effectiveness across numerous sectors, including finance, healthcare, and government. It comes with a stand allowing to set the reader in a vertical position for a most convenient use on desks. A supplemental USB-C to USB-A convertor is provided, supporting all ranges of PCs.

### About Thales Trusted Cyber Technologies

Thales Trusted Cyber Technologies, a business area of Thales Defense & Security, Inc., is a trusted, U.S. provider of cybersecurity solutions dedicated to U.S. Government. We protect the government's most vital data from the core to the cloud to the edge with a unified approach to data protection. Our solutions reduce the risks associated with the most critical attack vectors and address the government's most stringent encryption, key management, and access control requirements.

# Technical Specifications

Contactless Smart Card interface	
<b>Supported Card Types</b>	<ul style="list-style-type: none"><li>ISO 14443 Type A &amp; B Parts 1-4</li><li>ISO 15693, ISO 18092 NFC</li><li>MIFARE®, FeliCa, SRI/SRIX, CTS, Innovatron, Picopass, Topaz Card</li></ul>
<b>Operating Frequency</b>	<ul style="list-style-type: none"><li>13.56MHz</li></ul>
<b>Reading Distance</b>	<ul style="list-style-type: none"><li>Up to 70 mm (Depending on tag type)</li></ul>
<b>Read / Write Speed</b>	<ul style="list-style-type: none"><li>106/212/424/848 kbps (ISO 14443)</li><li>26/53 kbps (ISO 15693)</li></ul>
<b>Supported NFC Mode</b>	<ul style="list-style-type: none"><li>Card Reader/Writer, Keyboard Emulation, Card Emulation</li></ul>
Host interface	
<b>Protocol</b>	<ul style="list-style-type: none"><li>USB CCID</li></ul>
<b>Connector Type</b>	<ul style="list-style-type: none"><li>USB Type-C and Type-A (with USB-C to USB-A convertor)</li></ul>
<b>Speed</b>	<ul style="list-style-type: none"><li>USB 2.0 Full Speed (12 Mbps)</li><li>compatible with USB 3.0</li></ul>
<b>Supply Voltage</b>	<ul style="list-style-type: none"><li>5VDC</li></ul>
<b>Current Consumption</b>	<ul style="list-style-type: none"><li>Max. 300mA</li></ul>
<b>USB Firmware Upgrade</b>	<ul style="list-style-type: none"><li>Supported</li></ul>
Physical Characteristics	
<b>Dimension (LxWxH)</b>	<ul style="list-style-type: none"><li>Main body: 85.0 x 60.0 x 9.0 mm</li></ul>
<b>Weight (±5 g)</b>	<ul style="list-style-type: none"><li>67 g (USB Type C)</li></ul>
<b>USB cable Length</b>	<ul style="list-style-type: none"><li>1 m (Non-detachable)</li></ul>
Peripherals	
<b>LED</b>	<ul style="list-style-type: none"><li>1 x Programmable LED (red, green and blue)</li></ul>
Operating Condition	
<b>Temperature</b>	<ul style="list-style-type: none"><li>0-60°C</li></ul>
<b>Humidity</b>	<ul style="list-style-type: none"><li>90% (Non-condensing)</li></ul>
<b>MTBF</b>	<ul style="list-style-type: none"><li>500,000 Hours</li></ul>
Certifications & Compliance	
<b>Certifications</b>	<ul style="list-style-type: none"><li>CE, FCC, UKCA, VCCI, KC, RoHS, REACH, WEEE, J-LIS</li><li>Microsoft® WHQL</li></ul>
<b>Compliance</b>	<ul style="list-style-type: none"><li>USB CCID, PC/SC</li><li>TAA</li></ul>
Drivers & Support	
<b>Driver Supported OS</b>	<ul style="list-style-type: none"><li>Windows®, macOS</li></ul>
<b>Warranty</b>	<ul style="list-style-type: none"><li>1 Year</li></ul>