The TWN3 MIFARE NFC transponder reader is designed for easy integration into various applications.

The device supports either USB or RS232 communication just in dependence on the connection cable and is available as ready-to-connect desktop reader in a slim line black or white housing or as a OEM board (PCB) without housing for direct integration into embedded applications.

Readers can be programmed with a script language for autonomous execution of even complex commands like login procedures, increment/decrement functions and many more.

The Secure Access Module (SAM) is supported for enhanced security and cryptographic performance. This enables the application to perform secure transactions, e.g. payment terminals etc.

Additional features for OEM PCB version:

- 5 V serial TTL interface
- 2 General Purpose Outputs
## Technical Data

<table>
<thead>
<tr>
<th>Housing</th>
<th>Material ABS UL94-V0, colour black or white</th>
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<tbody>
<tr>
<td>Frequency</td>
<td>13.56 MHz</td>
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</tbody>
</table>
| Dimensions      | Desktop Reader: 88mm x 56mm x 18mm / 3.5inch x 2.2inch x 0.7inch  
OEM Board: 76mm x 49mm x 14mm / 3.0inch x 1.9inch x 0.6inch |
| Power Supply    | 5V ± 10% via communication cable (USB); serial version requires external power supply |
| Supply Current  | 65mA typ. (USB, normal operation); 120mA peak |
| Temperature     | Storage: -45°C up to +85°C (-49°F up to 185°F)  
Operating: -25°C up to +80°C (-13°F up to 176°F) |
| Antenna         | PCB Aircoil                                 |
| R/W Distance    | up to 100 mm / 4 inch (depending on transponder) |
| Host Interfaces | USB, RS232. The OEM board supports both and an additional serial TTL interface via a separate connector |
| OS Support      | Windows XP, Vista, 7(32/64 bit), 8, 8.1 and Linux |
| Communication Parameters | USB: Full speed (12 MBit)  
RS232: Baudrate: 1200, 2400, 4800, 9600, 19200, 38400, 57600  
Parity: none, even, odd |
| Modes of Operation | USB keyboard emulation  
USB virtual COM port (bi-directional communication)  
Direct access to built-in RFID module (transparent mode) |
| Special Features | Powerful scripting language |
| Supported Transponders | ISO14443A: MIFARE Classic 1k & 4k, MIFARE Classic 1k & 4k EV1³, Plus S&X, Pro X, SmartMX, Ultralight, Ultralight EV1⁴, Ultralight C, NTAG2xx⁴  
SLE44R35, SLE66Rxx (my-d move), LEGIC Advant¹, PayPass³  
ISO14443B: Calypso², CEPAS², Moneo², PicoPass², SRI512, SRT512, SRI4K, SRIX4K |
| Certifications  | CE, Australia, EAC, FCC, IC, RoHS-II compliant |
| Weight          | Approximately 15g (without housing) |
| Order Code      | OEM board Desktop reader: T3DO-F  
USB black: T3DT-FB2BEL  
USB white: T3DT-FB2WEL  
Serial black:T3DT-FR2BEL  
Serial white: T3DT-FR2WEL |

¹) UID only ²) UID only - read/write on request ³) AES only ⁴) r/w, enhanced security features planned

### Accessories

| Order Code       | Snap-in holder  
HKSI-B - black, HKSI-W - white |
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<tr>
<td>Bracket Holder</td>
<td>HKBR-B - black, HKBR-W - white</td>
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</tbody>
</table>
| Order Code       | PWA-EU - Power Supply (EU)  
PWA-AUS - Power Supply (AU) |
| PWA-US - Power Supply (US)  
PWA-UK - Power Supply (UK) |
| CAB-U2 - USB cable 200cm / 78.74inch  
CAB-U4 - USB cable 45cm / 17.72inch  
CAB-U7 - USB cable 120cm / 47.24inch  
CAB-M1 - USB cable mini 12cm / 4.72inch  
CAB-R2 - RS232 cable 200cm / 78.74inch |

### Drawing/Pin Out

Refer to document DS_TWN3 Pinout & Cables

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