

# TWN3 LEGIC NFC

## 13.56MHz Contactless Reader/Writer



The TWN3 LEGIC 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.

Additional features for OEM PCB version:

- 5 V serial TTL interface
- 2 General Purpose Outputs

Technical Data																
Housing	Material ABS UL94-V0, colour black or white															
Frequency	13.56 MHz															
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	140mA typ. (USB, normal operation); 200mA peak															
Temperature Range	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 100mm / 4 inch (depending on transponder)															
Host Interface	USB, RS232. The OEM board supports both and an additional serial TTL interface via a separate connector															
OS Support	Windows Vista, XP, 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	<ul style="list-style-type: none"> <li>▪ LEGIC Advant</li> <li>▪ LEGIC Prime</li> <li>▪ ISO14443 A+B compatible to part 4: MIFARE DESFire EV<sup>3</sup>), MIFARE Plus S,X<sup>3</sup>), MIFARE Pro X<sup>3</sup>), MIFARE SmartMX<sup>3</sup>), SLE66Rxx (my-d move)<sup>3</sup>), SLE44R35<sup>1</sup>), PayPass<sup>1</sup>), NTAG2xx<sup>4</sup>),</li> <li>▪ ISO15693: EM4x35<sup>3</sup>), Tag-It<sup>3</sup>), SRF55Vxx (my-d vicinity)<sup>3</sup>), ICODE SLI<sup>3</sup>)</li> <li>▪ MIFARE: Classic<sup>3</sup>), Classic EV1<sup>4</sup>), Mini<sup>1</sup>), Ultralight<sup>3</sup>), Ultralight C<sup>3</sup>), Ultralight EV1<sup>4</sup>)</li> <li>▪ Sony FeliCa<sup>1</sup>)</li> <li>▪ NFC Forum Tag Type 2-4<sup>3</sup>)</li> <li>▪ PicoPass<sup>1</sup>), HID iCLASS<sup>1</sup>), HID iCLASS SE/SR<sup>1</sup>)</li> </ul>															
Certifications	CE, Australia, ANATEL, Argentina, CFT, EAC, FCC, IC, India, Malaysia, Singapore, SRRC, Taiwan, RoHS-II compliant															
Weight	Approximately 15g (without housing)															
Order Code	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">OEM board</td> <td style="width: 33%;">Desktop reader</td> <td style="width: 33%;"></td> </tr> <tr> <td>T3DO-B</td> <td>USB black: T3DT-BB2BEL</td> <td></td> </tr> <tr> <td></td> <td>USB white: T3DT-BB2WEL</td> <td></td> </tr> <tr> <td></td> <td>Serial black: T3DT-BR2BEL</td> <td></td> </tr> <tr> <td></td> <td>Serial white: T3DT-BR2WEL</td> <td></td> </tr> </table>	OEM board	Desktop reader		T3DO-B	USB black: T3DT-BB2BEL			USB white: T3DT-BB2WEL			Serial black: T3DT-BR2BEL			Serial white: T3DT-BR2WEL	
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<sup>1</sup>UID only <sup>2</sup>Encryption not supported <sup>3</sup>UID only, read/write depending on demand <sup>4</sup>r/w, enhanced security features planned

Accessories			
Order Code	Snap-in holder HKSI-B - black, HKSI-W - white		Bracket Holder HKBR-B - black, HKBR-W - white
			
Order Code	PWA-EU - Power Supply (EU) PWA-AUS - Power Supply (AU)	PWA-US - Power Supply (US) PWA-UK - Power Supply (UK)	CAB-B2 - USB cable 200cm / 78.74inch CAB-B4 - USB cable 45cm / 17.72inch CAB-B7 - 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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