## **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			
	Desktop Reader: 88mm x 56mm x 18mm / 3.5inch x 2.2inch x 0.7inch			
Dimensions	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	Storage: -45°C up to +85°C (-49°F up to 185°F)			
Range	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) and Linux			
Communication Parameters	USB: Full speed (12 MBit)			
	RS232: Baudrate: 1200, 2400, 4800, 9600, 19200, 38400, 57600			
	Parity: none, even, odd			
	USB keyboard emulation			
Modes of Operation	USB virtual COM port (bi-directional communication)			
	Direct access to built-in RFID module (transparent mode)			
Special Features	Powerful scripting language			
Supported	LEGIC Advant			
Fransponders • LEGIC Prime				
	<ul> <li>ISO14443 A+B compatible to part 4: MIFARE DESFire EV1<sup>3</sup>, MIFARE Plus<sup>3</sup>, MIFARE SmartMX<sup>3</sup>, my-d move</li> </ul>			
	(SLE66Rxx) <sup>3)</sup> , PayPass <sup>1)</sup> , etc.			
	<ul> <li>ISO15693: EM4035, Tag-It, my-d vicinity (SRF55Vxx), ICODE SLI<sup>3)</sup></li> </ul>			
	<ul> <li>MIFARE Classic<sup>3</sup>, MIFARE Ultralight<sup>3</sup>)</li> </ul>			
	<ul> <li>Sony FeliCa<sup>2)</sup></li> </ul>			
	NFC Forum Tag Type 2-4			
	PicoPass <sup>1</sup> , HID iCLASS <sup>1</sup> )			
Certifications	CE, R&TTE, RoHS-II compliant, FCC, IC, VCCI			
Weight	Approximately 15g (without housing)			
Order Code	OEM board Desktop reader: ART13790			
	USB black: ART13857			
	USB white: ART13858 Serial black: ART13859			
	Serial white: ART13860			

 $^{1)}\text{UID}$  only  $^{2)}\text{encryption}$  not supported  $^{3)}\text{UID}$  only, read/write depending on demand

Accessories			
Order Code	Snap-in holder	Bracket Holder	ART11493 USB cable 200cm / 78.74inch
	ART13512 black,	ART15203 black,	ART13488 USB cable 45cm / 17.72inch
	ART15344 white	ART15235 white	ART13829 USB cable 120cm / 47.24inch
Order Code	ART14712 Power Supply (EU)	ART14713 Power Supply (US)	ART14269 USB cable mini 12cm / 4.72inch
	ART14714 Power Supply (AU)	ART14715 Power Supply (UK)	ART12240 RS232 cable 200cm / 78.74inch

## **Drawing / Pin Out**

Refer to document DS\_TWN3 Reader Family Pinouts

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