

# NANO MODULE MULTI125 LV

## 125kHz Contactless Reader/Writer



Elatec's Nano Module Multi125 LV is designed for integration into machines, handheld computer or any other device. The focus is set especially on size, price and flexibility.

Thanks to its compact dimensions an integration directly on a PC board is possible.

Following special features:

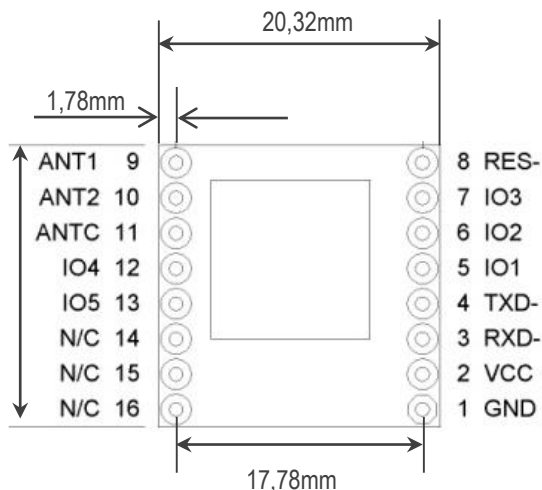
- Support for many different transponder types.
- Five configurable I/Os.
- Transponder operation can be triggered externally.

## Technical Data

<b>Housing</b>	without
<b>Frequency</b>	125kHz+/- 0.5%
<b>Dimensions (L x W x H)</b>	20,32mm x 20,32mm x 6,0mm / 0.80inch x 0.80inch x 0.24inch - Height is measured from surface of carrying PCB. Length of pins for soldering into carrying PCB is additional 3.3mm / 0.13inch
<b>Power Supply</b>	3.15 – 5.5 V DC
<b>Current Consumption</b>	RF field off: 15mA RF field on: typically 50mA, depending on antenna
<b>Temperature Range</b>	Operating: -25°C up to +80°C (-13°F up to +176°F) Storage: -40°C up to +85°C (-40°F up to +185°F)
<b>Relative Humidity</b>	5% to 95% non-condensing
<b>Antenna</b>	To be connected externally (490 µH)
<b>Read- / Write Distance</b>	Proximity, depending on antenna and tag
<b>Supported Transponders</b>	<ul style="list-style-type: none"> <li>▪ EM4100, EM4102, EM4105, EM4200<sup>1)</sup></li> <li>▪ EM4026, EM4126</li> <li>▪ EM4050, EM4150, EM4350, EM4450</li> <li>▪ FDX-B</li> <li>▪ HITAG 1, HITAG 2, HITAG S (without crypto mode)</li> <li>▪ Miro</li> <li>▪ TITAN (4050), UNIQUE, ZOODIAC</li> </ul>
<b>Certification</b>	RoHS-II compliant
<b>Weight</b>	Approx. 2g
<b>Order Code</b>	T3NM-N-LV

<sup>1)</sup> Only emulation of 4100,4102 and 4105

## Schematically Picture (component side)



All dimensions approximately and in mm; Pin Spacing 2,54mm

## Pinning

Pin	Name	Description
1	GND	Ground
2	VCC	Supply Voltage
3	RxD-	Data input, CMOS TTL-Level (low active)
4	TxD-	Data output, CMOS TTL-Level (low active)
5...7	IO1, IO2, IO3	Free programmable I/O, e.g. for LEDs or loudspeakers
8	RES-	RESET (low active)
9	ANT1	Antenna connector
10	ANT2	Antenna connector
11	ANTC	Tuning capacitor for antenna; (second pin is ANT1)
12...13	IO4 IO5	Free programmable I/O, e.g. for LEDs or loudspeakers
14...16	N/C	for internal use

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