## **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				
Housing	without			
Frequency	125kHz+/- 0.5%			
Dimensions (L x W x H)	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			
Power Supply	3.15 – 5.5 V DC			
Current Consumption	RF field off: 15mA			
	RF field on: typically 50mA, depending on antenna			
Temperature Range	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)			
Relative Humidity	5% to 95% non-condensing			
Antenna	To be connected externally (490 µH)			
Read- / Write Distance	Proximity, depending on antenna and tag			
Supported Transponders	■ EM4100, EM4102, EM4105, EM4200 <sup>1)</sup>			
	■ EM4026, EM4126			
	■ EM4050, EM4150, EM4350, EM4450			
	■ FDX-B			
	HITAG 1, HITAG 2, HITAG S (without crypto mode)			
	Miro			
	TITAN (4050), UNIQUE, ZOODIAC			
Certification	RoHS-II compliant			
Weight	Approx. 2g			
Order Code	T3NM-N-LV			

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

Schematically Picture (component side)	Pinning		
	Pin	Name	Description
, 20,32mm	1	GND	Ground
<del>-</del>	2	VCC	Supply Voltage
1,78mm \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3	RxD-	Data input, CMOS TTL-Level
			(low active)
↑ ANT1 9	4	TXD-	Data output, CMOS TTL-Level
ANT2 10 🔘 7 103			(low active)
ANTC 11 ( 6 IO2	57	101, 102,	Free programmable I/O, e.g. for LEDs or
IO4 12 🔘 🔘 5 IO1		103	loudspeakers
IO5 13 🔘 🔘 4 TXD-	8	RES-	RESET (low active)
N/C 14 🔘 🗆 💮 3 RXD-	9	ANT1	Antenna connector
N/C 15 ( ) 2 VCC	10	ANT2	Antenna connector
▼ N/C 16 ( ) 1 GND	11	ANTC	Tuning capacitor for antenna; (second pin
47.70			is ANT1)
17,78mm	1213	104 105	Free programmable I/O, e.g. for LEDs or
All dimensions approximately and in mm; Pin Spacing 2,54mm			loudspeakers
	1416	N/C	for internal use

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