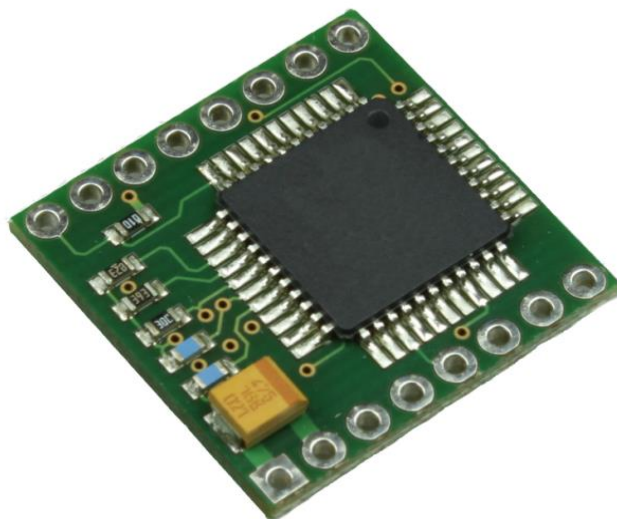


NANO MODULE MULTI125

125kHz Contactless Reader/Writer



Elatec's Nano Module Multi125 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:

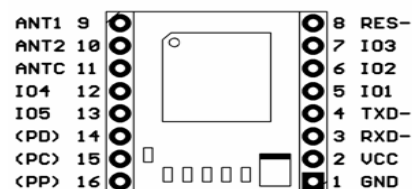
- Support for many different transponder types.
- Five configurable I/Os.
- Transponder operation can be triggered externally.

Technical Data

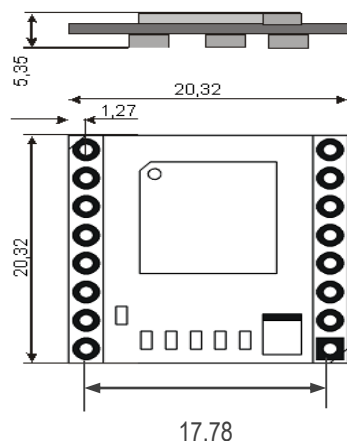
Housing	without
Frequency	125kHz \pm 0.5%
Dimensions (L x W x H)	20,32 mm x 20,32 mm x 5,35mm / 0.80inch x 0.80inch x 0.21inch
Power Supply	5.0 V DC \pm 5%
Current Consumption	RF field off: 15mA RF field on: typically 75mA, depending on antenna
Temperature Range	Operating: -25°C up to +80°C (-13°F up 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 μ H)
Read- / Write Distance	Proximity, depending on antenna and tag
Supported Transponders	<ul style="list-style-type: none"> ▪ EM4100, EM4102, EM4105, EM4200²⁾ ▪ EM4050, EM4150, EM4350, EM4450 ▪ FDX-B ▪ HITAG 1, HITAG 2, HITAG S (without crypto mode) ▪ Miro ▪ Q5¹⁾ ▪ T5557¹⁾, T5567¹⁾, T5577¹⁾ ▪ TITAN (4050), UNIQUE, ZODIAC
Certification	RoHS-II compliant
Weight	Approx. 2g
Order Code	T3NM-N

¹⁾ Only Manchester f/64, sequence terminator off ²⁾ Only emulation of 4100,4102 and 4105

Schematically picture (component side)



Dimensions



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

Pinning

Pin	Name	Description
1	GND	Ground
2	VCC	+5V \pm 5%, max. 75mA
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	PD PC PP	for internal use

Elatec reserves the right to change any information or data in this document without prior notice. The distribution and the update of this document is not controlled. Elatec declines all responsibility for the use of product with any other specifications but the ones mentioned above. Any additional requirement for a specific customer application has to be validated by the customer himself at his own responsibility. Where application information is given, it is only advisory and does not form part of the specification. Disclaimer: All names are registered trademarks. © 2015 Elatec GmbH – DocRev5 – 08/2015