

## RFID MODULES WITHOUT ANTENNA

ELATEC also offers RFID modules without antenna designed for integration into machines or other devices. They are offered in different versions and can be connected to external antennas through cables or printed circuit boards. They are highly customizable and their behavior can be automated depending on various criteria.

### **MULTI-FREQUENCY MODULES**

- + TWN4 main features support
- + Support TWN4 technology
- + Easy to programm
- + Supports all major RFID technologies, including the ISO standards 14443 A&B, 15693 and 18092/ECMA-340

### TWN4 MULTITECH NANO\*



#### **FEATURES**

- + All components mounted on one side for easy integration
- + SMT or THT mounting\*\*
- + PCB size: 31 x 17.8 x 2.7 mm
- + Supports all major LF & HF RFID technologies incl. NFC
- \* LEGIC version available, \*\*Depending on product variant
  For exact specifications of each reader, please refer to the corresponding data sheet.

# **MODULE ANTENNAS**

### DUAL AND SINGLE FREQUENCY

ELATEC offers a variety of off-the-shelf antennas for integration with its RFID modules.

### **LOW FREQUENCY AIRCOIL ANTENNAS (125 KHZ)**

ORDER CODE	ANT-002	ANT-004	ANT-006	ANT-036	ANT-0101
INNER Ø <sup>2</sup>	47/1.85	5.1/0.2	17/0.67	16/0.63	
OUTER Ø <sup>2</sup>	52/2.05	5.17/0.21	< 22/0.87	20.4/0.8	8.5/0.34
HEIGHT <sup>2</sup>	4/0.16	4/0.16	4/0.16	2/0.08	21/0.83
INDUCTANCE	490 μH ± 5%	490 µH ± 5%	490 μH ± 5%	490 μH ± 5%	490 μH ± 5%
PICTURE		-			

ORDER CODE	ANT-005	ANT-007	ANT-013	ANT-015	ANT-031	ANT-033
LENGTH <sup>3</sup>	40/1.57	57/2.27	41/1.61	30/1.18	27.5/1.08	27.5/1.08
WIDTH <sup>3</sup>	20/0.79	36/1.42	30/1.18	28/1.1	15/0.59	15/0.59
HEIGHT <sup>3</sup>	3.2/0.13	3/0.12	2/0.08	3/0.12	2.5/0.1	2.5/0.1
INDUCTANCE	490 µH ± 5%	490 μH ± 5%				
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### **PCB ANTENNAS**

ORDER CODE	ANT-022	ANT-023	ANT-032	
FREQUENCY	125/134.2 kHz + 13.56 MHz	125/134.2 kHz + 13.56 MHz	13.56 MHz	
LENGTH <sup>2</sup>	56/2.20	33/1.30	20/0.79	
WIDTH <sup>2</sup>	46/1.81	30/1.18	40/1.57	
HEIGHT <sup>2</sup>	6/0.24	6/0.24	2.2/0.09	
IMPEDANCE (HF)	50	50	50	
IINDUCTANCE (LF)	490 μH ± 5%	490 μH ± 5%		
CONNECTORS	LF: Pins, HF: UMCC/U.FL, HF: SMA SMB, SMC, MCX	LF: pads 1 mm/0.04 inch HF: UMCC/U.FL, pads 1 mm/0.04 inch	HF: UMCC/U.FL	
CABLES	CAB-L1 <sup>4</sup> , CAB-F1 <sup>5</sup>	CAB-L1 <sup>4</sup> , CAB-F1 <sup>5</sup>	CAB-L1 <sup>4</sup> , CAB-F1 <sup>5</sup>	
PICTURE				

1) ANT-010 is a ferrite antenna 2) Dimensions in mm/inch 3) Outer dimensions in mm/inch 4) UMCC antenna cable, 100 mm, female to female for 13.56 MHz, right angle 5) Flat ribbon antenna cable, 100 mm, AWG26, 2-pol, 3 mm tinned on both sides for 125 kHz. For exact specifications of each antenna, please refer to the corresponding data sheet.

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