



OBID i-scan® HF

# Manual Antenna Tuner ID ISC.MAT



### **FEATURES**

- → Easy "Plug & Play"
- → Manual tuning and retuning of HF Long Range Antennas without additional tuning devices
- → Tuner is driven via HF connection
- → Parameters or calibration status can be sent to the host via HF connection
- → Available with and without switch for electronic disconnection of the antenna circuit









## SHORT DESCRIPTION

The tuning board ID ISC.MAT-B /-S is a manual adjustable matching circuit for construction of customized single antennas with an operating frequency of 13.56 MHz and an input impedance of 50  $\Omega$ .

In connection with an antenna conductor (e.g. aluminium band, copper pipe or the outer sheath of RG213 cables) antennas of different sizes and shapes can be built easily.

The tuning of the antennas takes place after assembly of the antenna conductor by using individually switchable capacitors. After that the antenna is permanently adjusted to their environment. A retuning of the antenna could be possible if the antenna is mounted on a place with different ambient conditions.

The tuning board ID ISC.MAT.S-A is able to disconnect the antenna circuit through a electronic switch up to a certain power.



#### **ORDER DESCRIPTIONS**

ID ISC.MAT-B Manual Antenna Tuning Board ID ISC.MAT.S-A Manual Antenna Tuning Board with Switch

#### **TECHNICAL DATA**

#### **Mechanical Data**

Dimensions (W x H x D)

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ID ISC.MAT-B 90 mm x 45 mm x 17 mm ID ISC.MAT.S-A 90 mm x 45 mm x 19 mm

Weight approx. 35 g

#### **Electrical Data**

Operating frequency 13.56 MHz Transmitting power maximum 8 W

SMA HF socket RG58 Reader connection

Antenna conductor connection Double-sided solder surface with

hole for screw attachment (M3)

#### Antenna parameters

Carrier frequency 13.56 MHz

Impedance 50Ω

Tuning range inductivity  $0.6 - 2.5 \mu H$ Quality 10 - 50

#### **Ambient conditions**

Temperature range

Operation -25°C up to 55°C -25°C up to 60°C Storage Vibration EN 60068-2-6

10 Hz - 150 Hz: 0.075 mm / 1 g

Shock EN 60068-2-27

acceleration: 30 g





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