

Europe  
21. Apr 09 (Graz) / 01. Oct 09 (Graz)

Asia  
15. Jun 09 (Shanghai) / 19. Jun 09 (Singapore)

USA  
On demand

## A-1 Proximity ANTENNA Training Part 1

**Technical introduction into the Contactless Interface based on 13.56MHz.**

**This Training shows the theoretical basis and its practical use for Antenna design and measurement of magnetic Antenna systems.**

**Audience**

New technical engineers  
System designer  
Disti FAE

**Prerequisites**

Basic electrotechnical knowledge  
Laptop with WIN 2000 or XP (incl. MS Excel) for the workshop session (administration rights required!)

**Welcome and Introduction**

**Introduction of Magnetic Antenna Systems**

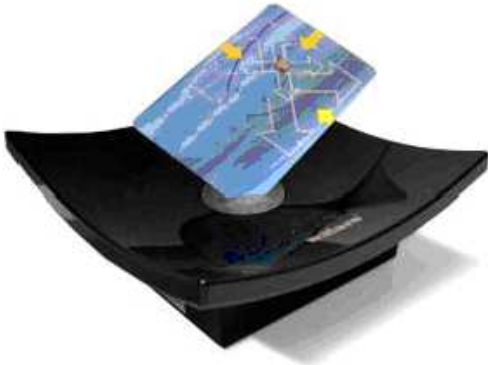
**RF Interface related Standards  
(ISO/IEC 14443, ISO/IEC 15693, Payment -EMVCo)**

**Data Transmission and Modulation**

**Workshops Part 1**

Impedance measurements and Q-Factor analysis  
Hands-on with different materials and influence on the read/write performance  
Directly matched antenna design for Micore 1/2, NFC and ICODE  
Application examples and hands-on directly matched antenna design  
Card coil design

**Duration: 09:00 – 17:00**



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## A-2 Proximity ANTENNA Training Part 2

**Technical introduction into the Contactless Interface based on 13.56 MHz.**

**The Focus of this Training is the practical aspect of Antenna design, Tuning and Measurement of the Interface.**

**Audience**

New technical engineers  
System designer  
Disti FAE

**Prerequisites**

Basic electrotechnical knowledge  
Laptop with WIN 2000 or XP (incl. MS Excel) for the workshop session  
(administration rights required!)

**Directly matched antenna design - follow-up**

**50 Ohm matching for reader antenna**

**Workshops Part 2**

RF Amplifier for Reader systems  
Antenna Tuning for Payment  
NFC Antenna topologies

**Workshops Part 3**

Customer application focus session  
Hands-on antenna tuning

**Duration: 09:00 – 17:00**