



# Virtual Card Kit - now supports contactless communication

## Smart card simulation for high-performance development and test environments

The Virtual Card Kit from achelos is a powerful combination of software and hardware components to efficiently simulate chip card operation systems including applications. The product package consists of the Virtual Card Simulation, which includes the chip card operating system itself, as well as the Virtual Card Box, which represents the physical connection to the outside world.

### Virtual Card Kit

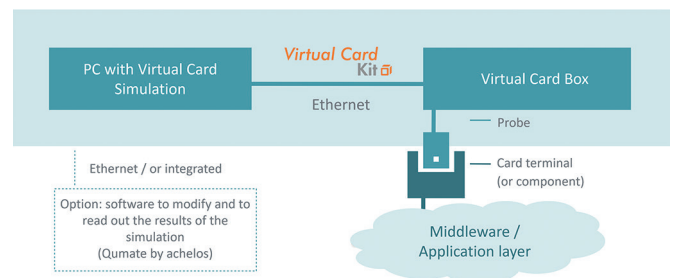
#### Key features:

- The new version now supports contactless and contact-based communication to fulfill the requirements in the German healthcare market
- Simulates the physical and logical chip card processes (operating system and card application)
- Provides interfaces to read, save, and modify the internal statuses of the operating system
- Supports chip card simulations for various industries e.g. eHealth, eMobility
- Logs card activity and supports manipulation of card behaviour during runtime



#### The Virtual Card Kit simulates the German electronic health cards and the digital tachograph cards

The Virtual Card Kit can be used as stand-alone chip card simulation or in combination with simulations and test suites from Qumate by achelos. It presents a powerful solution for high-class quality assurance. The Virtual Card Kit provides object systems to simulate all types of cards for the German healthcare market and digital tachograph.



#### Convenient Ethernet interface for direct simulation-connection

The Virtual Card Box requires no special drivers or installations. It can be easily connected via Ethernet to a PC. The Virtual Card Simulation runs in a Java Runtime environment and uses the Box to communicate with the outside world.

#### Component for development and test environments

The Virtual Card Kit can be used as a component in the highly automated test suites of Qumate by achelos. It is a solid choice for creating components and applications in the chip card environment.

## Specifications:

### Virtual Card Kit

The product package contains:

- Virtual Card Box
- Virtual Card Simulation
- Probe (ID-1, ID-000)
- Mains adaptor for power supply
- Mains lead
- User manual
- Object systems for health and tachograph cards



### Supply voltage

External 5 VDC via mini-USB connection

### Power consumption

max. 150 mA

### Connections

- Power supply: Mini-USB
- Data: 10/100 MBit Ethernet
- 16 pole plug

### Display indicators

- COMMUNICATION (the terminal has activated Virtual Card Simulation)
- READY (Virtual Card Box and Virtual Card Simulation are connected)
- POWER (Virtual Card Box is ready for operation)

## Terminal interface

### Terminal Vcc

2.7 V – 5.5 V

### Power consumption

max. 2 mA

### PPS divisors

Integer divisors: up to 8 as minimum divisor

### Terminal clock

1 to 10 MHz

### Supported card protocols

T=0 T=1 T=CL

### Virtual Card Simulation

card)

- ISO 7816, ISO 14443
- Cryptography: RSA, ECC, AES, DES, 3DES
- German health card gen. 2 (eGK, HBA, SMC, SMC-K and SMC-KT)
- Tachograph card gen. 1 + 2 (driver, workshop, control, and company)
- Multi-channel capability

### Dimensions (L/W/H)

L: 13.1 cm / W: 10.2 cm / H: 3.6 cm