

MP300 CL2

Production Range

High performance industrial contactless reader/writer and tester



- ✓ Industrial contactless smart card reader and tester
- ✓ Support of ISO 14443 A/B, Innovatron, Mifare™ (classic, light, ultralight), FeliCa™, ISO 15693 (Vicinity), ISO 18000-3 Mode 1
- ✓ High baud rates
- ✓ Can be assembled with a MP300 contact reader/tester

MP300 CL2 Overview

Dedicated to the contactless technology, the MP300 CL2 is the ideal coupler for the personalization and pre-personalization of cards in production. By offering the possibility to change the most important RF parameters, this device allows to check the behaviour of your card, or micro-module in different environments, thus ensuring the quality of your production.

Moreover, its integrated support of a wide range of different types of contactless smart cards and the possibility to be coupled with a MP300 contact reader makes the MP300 CL2 your universal solution in order to produce faster and better.

To ease the integration inside your production equipment, our engineers have designed a full range of antennas, and test heads, allowing you to use the MP300 CL2 to test wafers, micro-modules (using the two contact pin interface) or smartcards/inlays/e-Passports in mass production.

MP300 CL2

Technical specifications

■ Protocols

ISO/IEC 14443-3 Type A/B (proximity)

Anticollision, T=CL protocol handling

Innovatron

ISO/IEC 15693 (vicinity)

Single carrier variante

ISO 18000-3 Mode 1

Mifare™

Support of Mifare Classic, Light, Ultra-light

Felica™ 212/424 kbits/s

Polling, read and write features. Security management add-on available on demand

Raw mode

Gives the possibility to exchange frames without any protocolary encapsulation

Support of out of standard chips

Benefit from Micropross'experience in smartcard programming

■ Programmable parameters

Physical parameters

Field strength

Modulation index (0 to 100% step 1%)

Field rise time (from 0 to 5ms step 10us)

Carrier frequency (from 12.56 MHz to 14.56 MHz step 100 Hz)

Modulation rise and fall times (from 0 to 10us)

Logical parameters

Type A pause width (0 to 4.4 us)

Frame waiting time (set in ETU)

Type B framing: SOF, EGT, EOF, and each bit duration, independantly programmable in clock cycles

Communication speed: 106kbit/s, 212 kbit/s, 424 kbit/s, 848 kbit/s

■ SAM (Security access module) plug available

An ISO 7816-3 compliant SIM chip reader is available on each CL2 module, in case security features are needed

■ Others

Communication

USB 2.0

TCP/IP 10/100 Mbits/s

Development

Development in C, C++, VB, Java, .NET environments

■ Optional devices

Software

MVPI: Micropross Versatile Production interface

Hardware

Custom design antenna

■ Tests

Automatic testing

Send type A command, wait, send type B command and receive answer (for type B cards)

Send type B command, wait, send type A command and receive answer (for type A cards)

Switch on field, wait, send request command (A or B), receive answer

Send request, wait, send request, receive the answer

Antitearing

PICC reset characterization

Check minimum FDT (frame delay time)

Response time measurement

Sending out of standard frames

Sending misformed blocks (wrong number of bits)

Retro modulation ratio measurement

Distance simulation checking

■ Communicates with and tests :

Wafers

Micro-module

e-Passport

RFID tags (13.56 MHz)

Inlays

Prelaminates

Smartcards

■ Antenna

The MP300 CL2 is delivered with the PN 907-2094 antenna, suitable for ID1 smartcards (15 x 70 mm). Other Antenna can be designed upon specification for easier integration. The 50 Ohms output impedance allows touse the PCD antenna described in the ISO/IEC 10373-6 standard.

■ Open platform

Micropross products are designed for an easy integration. Applications can run on a host computer or in embedded mode. The device can be managed by usual programming languages. High speed and simplified communications are ensured with TCP/IP or UDP connections.

■ Our service

We provide you not only an useful product but also an efficient technical support and our experience. Micropross is at your disposal for any user requirement and integration support.

Micropross is an ISO 9001 V 2000 certified company.