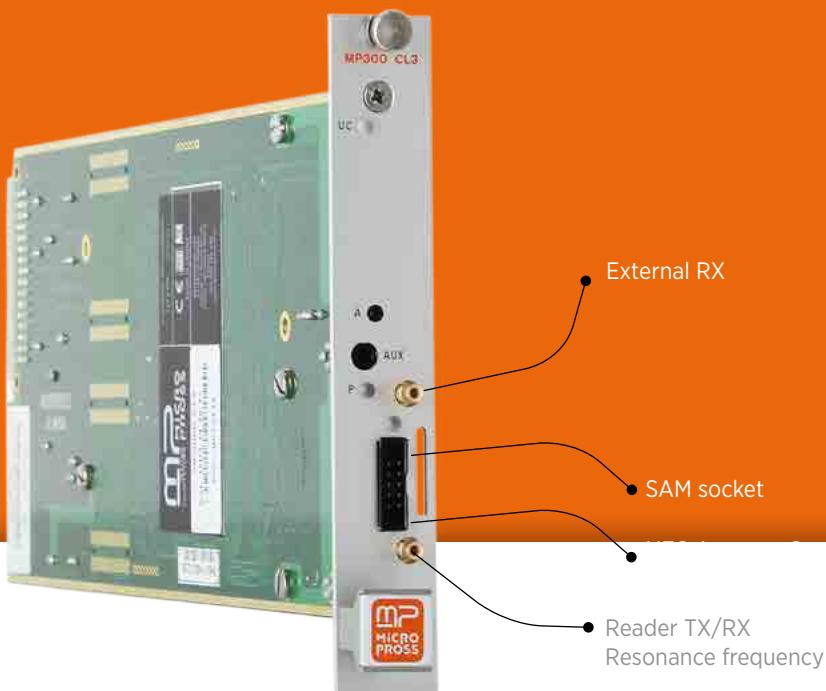


MP300 CL3

A PRODUCTION TESTER FOR ALL TYPES OF
CONTACTLESS OBJECTS (smartcards, micromodules, inlays,
smartcards readers, NFC devices, WPC Base stations and mobile devices)



SUPPORTED PROTOCOLS:

- ▶ ISO 14443 A/B
- ▶ Innovatron™
- ▶ ISO 15693
- ▶ Mifare™
- ▶ Felica™
- ▶ WPC (Qi)

APPLICATION FIELDS:

- ▶ Personalization
- ▶ Pre-personalization
- ▶ OS loading
- ▶ Production test of NFC devices
- ▶ Production test of WPC products

SUPPORTED TESTS:

- ▶ Resonance frequency/Q factor
- ▶ Complex impedance (L, R, C)
- ▶ Hmin measurement
- ▶ Chip load-modulation
- ▶ Input sensitivity detection
- ▶ Accurate definition of test parameters
- ▶ Coverage of both card and reader mode of NFC devices
- ▶ Simulation of WPC mobile device and base stations

Business areas



Telecom



Banking



E-health



E-Passport

E-ID
(driver licences, ID cards...)

NFC enabled U-SIM

Contact micro-module



WPC



Mastercard CQM testing



M2M

KEY POINTS

- ▶ Compatible with ISO/IEC 14443-3 and -4, ISO/IEC 15693, Mifare™, FeliCa™, Innovatron™ specifications
- ▶ Full management of the T=CL protocol
- ▶ Supports the highest bitrates (up to 848kbps by default, up to 6.8Mbps with the VHBR option)
- ▶ All physical parameters adjustable (field strength, carrier frequency, modulation index, rise and fall time of the modulation, ...)
- ▶ Advanced logical test features (response time measurement, modulation (positive/negative), short time between two commands, ...)
- ▶ Advanced electrical measurement features: chip impedance, resonance frequency, Q factor of a smartcard, load modulation of a chip
- ▶ Supports both terminal and smartcard simulation: the tool tests all modes of a NFC device using the same test antenna
- ▶ Supports test of WPC compatible devices in production, in conjunction or independently from the NFC interface.

SUPPORTED PROTOCOLS

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

Supported data rates	106, 212, 424, 848 kbps Asymetrical data rates supported VHBR DSK 2 PSR
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▶ B' (Innovatron™)

▶ ISO/IEC 15693 (vicinity cards)

Supported communication speeds	Low & high data rates, 1 out of 4 & 1 out of 256
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▶ ISO 18000-3 Mode 1

▶ Mifare™

Types supported	Classic, Light, Ultra Light, Ultra Light C, ...
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▶ FeliCa™ optionnal through a hardware add-on

Available data rates	212 and 424 kbps
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▶ NFC Forum modes

Peer2Peer, Listening, Polling

▶ NFC Forum tags

Types supported	Tag types 1,2,3,4
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▶ ISO 18092 (NFC-IP1)

Modes supported	Active/passive mode, in both Initiator/Target variants
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▶ WPC (Qi)

Simulation of Mobile device, and Base station

▶ Raw mode : implementation of custom protocols and support of out of standard chips

PROGRAMMABLE PARAMETERS

PHYSICAL PARAMETERS

Field strength, modulation index, rise&fall times

LOGICAL PARAMETERS

Type A pause, FWT, type B framing, communication speed

AVAILABLE TESTS

ELECTRICAL TESTING

Resonance frequency measurement / Q factor

Complex impedance (chip/antenna)

Magnetic field measurement

Measurement of the power generated by the Base Station

www.nubicom.co.kr



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