

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)

BUSINESS AREAS:

- Telecom
- Banking
- E-health
- M2M
- E-Passport
- E-ID (driver licences, ID cards, ...)
- Micro-module production
- NFC
- Wireless power
- Mastercard CQM testing

APPLICATION DOMAINS:

- Personalisation
- Pre-personalisation
- 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



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
	Asymmetrical data rates supported
	VHBR DSK 2 PSR
• B' (INNOVATRON™)	
• ISO/IEC 15693 (VICINITY CARDS)	
Supported communication speeds	Low & high data rates, 1 out of 4 & 1 out of 256
• ISO 18000-3 MODE 1	
• MIFARE™	
Types supported	Classic, Light, Ultra Light, Ultra Light C, ...
• FELICA™ OPTIONNAL THROUGH A HARDWARE ADD-ON	
Available data rates	212 and 424 kbps
• NFC FORUM MODES	
Peer2Peer, Listening, Polling	
• NFC FORUM TAGS	
Types supported	Tag types 1,2,3,4
• ISO 18092 (NFC-IP1)	
Modes supported	Active/passive mode, in both Initiator/Target variantes
• 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