## Ensure Reliable NFC & Smart Card Technologies Anywhere

NomadLAB

standalone communication analyzer

## All-in-one solution to test...

- Contact & contactless smart cards
- Contact & contactless readers

KEGLABS

- USIM cards for mobile phones
- · Contactless front end components for NFC mobile phones
- 13.56 Mhz proximity contactless interface of NFC mobile phones

## Fully autonomous platform

- Single platform for contact & contactless smart card technologies
- On-board signal analysis in real time
- · Easy, ergonomic control via touchscreen user interface
- Battery powered, recharge from USB



**NomadLAB** helps ensure reliable NFC and Smart Card technology anywhere with signal capture and protocol analysis for the compete range of contactless and contact technologies in a platform that is portable, autonomous and easy to use.

With NomadLAB, contact and contactless signal analysis capabilities that were previously reserved for R&D and certification laboratories, is now available to engineers at all phases of the fielding of smart card and NFC solutions. Whether users are developing hardware and software, or supporting fielded products, NomadLAB provides visibility of communications between cards, readers and NFC systems. This allows users to rapidly identify a variety of interoperability problems.

NomadLAB's autonomy, price and test features are tailored to integrators and software developers making it the ideal diagnostic tool for companies who need to equip development and support teams.





#### Signal analyzer for NFC & Smart Cards

NomadLAB provides signal capture and protocol analysis of technologies widely used in payment and identity solutions, including future NFC phones. This includes support of **ISO14443** (A, B types) protocol for **13.56 Mhz** contactless smart cards, readers and systems, and **NFC** (IP1, IP2) protocol for mobile phones and related objects.



NomadLAB also supports **ISO7816** and **SWP** (HCI, HDLC) protocols for testing both contact smart cards, USIM cards and the contactless front end of NFC mobile phones.

Captured signal analysis from NomadLAB is easily shared between field support, design teams and test laboratories. Trace files can be viewed on either NomadLAB, or using RGPA software with NomadLAB or the ProxiSPY laboratory class spy and analyzer.

When viewed on a PC, users can take advantage of the full features of the RGPA software interface including precise time measurement, wave form and listing views of capture signals, search functions, statistics, detailed protocol command descriptions and more.

#### Complete, autonomous & easy to use

NomadLAB operates both as a PC peripheral (USB 2.0) and in a fully autonomous standalone mode for testing in the field. NomadLAB can be used and configured with KEOLABS' **Realtime Generic Protocol Analyzer** (RGPA) software and controlled by scripting like KEOLABS laboratory class test platforms.

In standalone mode, users benefit from a large **color display** with **tactile user interface** to facilitate tool configuration and display of communication traces.

The amount of information in the display is tailored to user needs, to provide the right level of visibility of protocol commands and application data. This allows users to easily understand where problems occur without getting bogged down in the complexities of low-level signal characteristics.



## **Ordering Information**

Platform modularity and firmware-based licenses allow users to order the functionality they need and easily upgrade their NomadLAB for future requirements.

- Order codes:
- SC-NomadLAB-HW: hardware platform only
- SC-NomadLAB-SPY-AB: ISO14443 (A, B) signal capture & analysis
- SC-NomadLAB-SPY-NFC: NFC (IP1, IP2) signal capture & analysis
- SC-NomadLAB-SPY-CT: SWP (HCI, HDLC), ISO7816 signal capture & analysis

Product may be purchased via our web store, or request a price quote by mail from **contact@keolabs.com**.

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