

# NIB for Educational Institutes



## Learn by Experiencing

**M**obile communication is reaching its peak in terms of number of connections across the globe, and number of bits transferred per MHz reaching almost to a level of Wi-Fi. With mobile communication becoming an integral part of our lives, educational institutes have introduced Mobile Communication or Wireless Communication as a subject in the curriculum.

## OMOCO FOR INNOVATION

Omoco can simulate a complete mobile network in lab environment so students gain a first-hand, practical learning experience. Universities can utilize Omoco technology to test any network-reliant ICT project under development. Use Omoco as a tool for education, research projects for verification of any new service and application over cellular network.

Omoco's network-in-a-box (NIB) is a complete wireless network packed into one box. It offers the following network node functionality, covering all important nodes in GSM/GPRS network architecture.

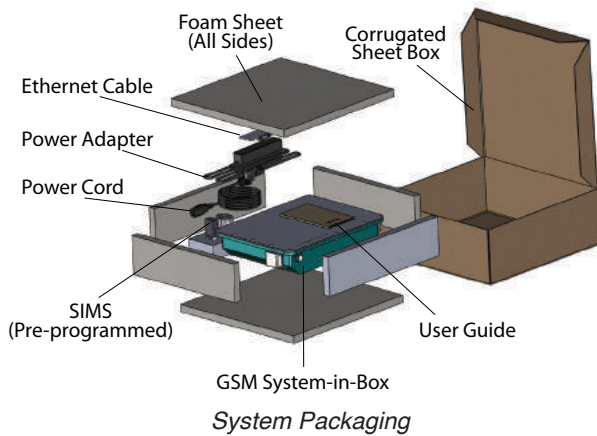
- BTS
- BSC
- MSC
- HLR
- SMSC
- xGSN
- SCF
- PCU

Omoco's single box offers radio and core network nodes functions, giving a sense of a complete, end-to-end GSM network.

## SALIENT FEATURES

1. **Quick and Simple Installation:** Install and operate in less than an hour
  2. **Logging Tools:** Detailed message flows on each interface and layer
  3. **Build your own Open APIs:** Open APIs to build your own SMS or USSD-based services. For example, integrate with your alarm system or the attendance tracking system.
  4. **Develop and Test Applications:** Use the setup to test multiple application scenarios that need complete mobile network in a lab environment. For example, Machine-to-Machine (M2M) application scenarios.
  5. **Multiple Interconnection:** Connect it with any VoIP server over standard SIP/RTP, with GSM as last-mile.
- **Standalone components:** Omoco NIB is fully 3GPP compliant – from all the network elements, collapsed interfaces to log messages.





Compact GSM System - 1 TRX

## PACKAGE INCLUDES

ITEM	QUANTITY
NIB Hardware	1
Phones	2
SIMS	2
Ethernet Cable	1
Power Cable & Adaptor	2

## SPECIFICATIONS

FREQUENCY BANDS	850/900/1800/1900
Technology	GSM, GPRS, EDGE
Interfaces (Out)	Ethernet and RF
RF Output Power	100mW (+20dBm)
Number of simultaneous call	7
O&M	CLI, GUI

## SERVICES

LOCATION UPDATE
Mobile Originated Voice Call
Mobile Terminated Voice Call
Mobile Originated SMS
Mobile Terminated SMS
Routing Area Update
Mobile Originated PDP Context

## ABOUT OMOCO

Omoco develops Deploy-it-yourself Micro Telecom Network solution, suitable for individuals, enterprises and communities who want to build their own wireless communication network.

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