

Ehangcom Network Monitoring Platforms

Monitoring with iSX1000 / iSX4000

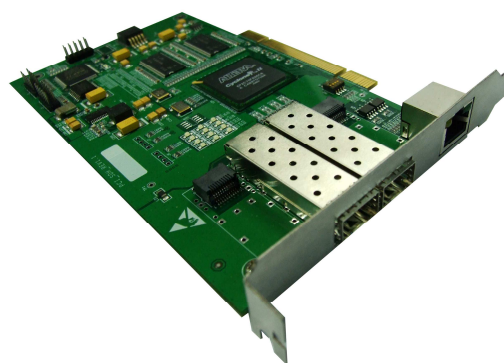
The Ehangcom network monitoring platform is based on iSX1000 or iSX4000 Universal Application Platform. iSX1000 targets small to medium deployment up to 384 channels of HDLC/SS7 link per system and iSX4000 targets high-density deployment up to 2048 channels of HDLC/SS7 link per system. Its modular design offers low entry cost for small deployments, which makes it ideal for proof of concept. Its field upgradeable flexibility allows users to expand capacity quickly for popular applications to capture market opportunities.

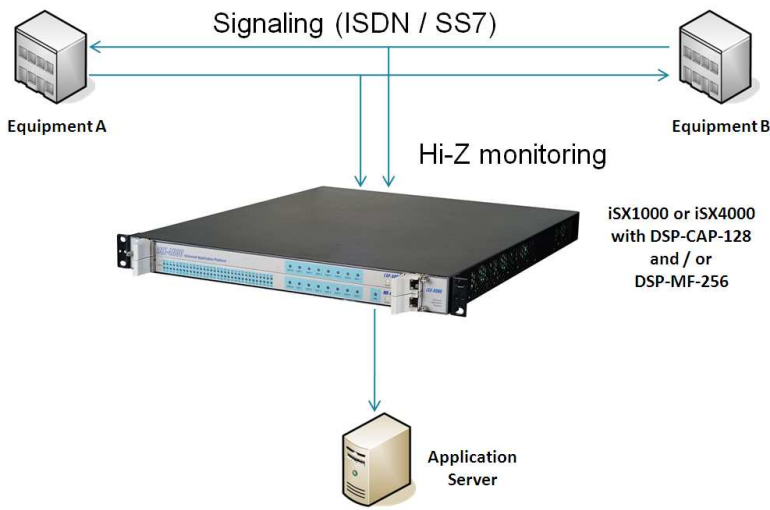
The Ehangcom network monitoring platforms use the best-in-class, dedicated processors for HDLC/SS7 monitoring and DSP resources for voice call logging. Each processor can process 140,000 MSU/s, which ensures full signaling data is captured even signaling links are at 100% link utilization.

The compact 1U form factor helps operators to significantly save rack space and better utilize the expensive data center space and hence reduce total cost of ownership.

Monitoring with ENM2000

ENM2000 is a low footprint, dual STM-1 PCI card that offers monitoring capability of two half duplex STM-1.





Applications

- Inter-operator settlement reconciliation
- Welcome SMS for inbound roamers
- Location based services
- Legal interception
- Call logging for call centers

Typical monitoring application using iSX1000 or iSX4000

Features & benefits

Key Features

Modular design

Multiple interfaces (T1/E1, STM-1)

Dedicated high-performance processors for signaling capture and DSP resources for passive recording

GUI OAM interface, C++ APIs

Compact 1U form factor

Benefits

Suitable for small deployments, easily scalable to very large scales

Applications can be deployed to different networks

Ensure full voice and signaling data captured even at 100% link utilization

Flexibility to develop complicated niche applications

Save rack space & reduce total cost of ownership

Specifications – iSX1000 and iSX4000

Telephony interfaces

iSX1000: 64 T1 / E1 or single STM-1 half duplex

iSX4000: 8 T1 / E1 half duplex

High-impedance isolation according to ITU-T G.772

Signaling capture module

Support Nx64 kbps and Nx8 kbps

General purpose HDLC (ISO 3309)

- X.25
- Frame Relay (LAPF/ANSI T1.618)
- ISDN D-channel (LAPD/Q.921)
- SS7 support

Per-channel protocol mode selection

- SS7 MTP2 or MTP3
- Transparent Mode

Processing capacity 140,000 MSU/s

Capable to handling traffic with Erlang = 1

Call-logging, passive recording module

Concurrent passive recording of 256 half duplex channels

Resource capacity – sig capture, passive recording

Signaling capture module: 128 links per module

Call-logging, passive recording module: 256 channels

iSX1000: up to 3 modules per system

iSX4000: up to 16 modules per system

Development environment

C++ APIs

Management

GUI OAM interface

SNMP traps

Signaling tracing, analysis & debugging

Specifications – ENM2000

Telephony interfaces

Monitoring port	Dual STM-1, 155 Mbps
Optical type	SFP, Single Mode
Optical interface	LC
Wavelength	1310nm
Sensitivity	-35dBm

Monitoring features

Programmable monitoring on any E1 on the STM-1

Able to capture 100% data on STM-1

64 Mbytes DDR SDRAM cache for data storage

System Interface

PCI 32 bit / 33 MHz

PCI 3.3 V / 5 V

Development environment

C++ APIs

Management

Alarm on LOS and LOF

Real-time statistics on J0/J1/C2

Physical Dimension

Length x Height: 175.6mm x 98.3mm

Power Consumption

Max power consumption: 6.5W

Operating Environment

Operating temperature 0 °C to 50 °C

Relative humidity 40% to 80%

Storage temperature -40 °C to 120 °C