

# INE LCD - WAN Simulation On The Go

**A Genuine WAN-in-a -Box**  
iTrinegy Network Emulator - LCD (INE-LCD) is a genuinely portable, all-in-one emulation device which can be used to recreate realistic network conditions on the go.

**Who is INE-LCD aimed at?**  
INE-LCD is a revolution in portable network emulation and network application testing on-the-go and is ideal for IT purchasers, sales and pre-sales field-based specialists wishing to show how an application or device will work in a realistic WAN, Wireless, Satellite network etc..

At only 8ins x 9ins x 2ins (200mm x 240mm x 50mm), its small size makes it easy to transport and use in the field.

It is also suited to the Professional Developer, Tester or IT Specialist looking for a cost effective, simple to use Network Emulator for



testing how their applications perform in networked production environments.

### No Need for a Keyboard Monitor or Mouse

INE-LCD eliminates the need for a keyboard, monitor and mouse as all its settings are simply made and saved via a front LCD screen with “car radio style” push buttons to choose pre-defined or programmable conditions needed to test any application in a realistic replication of the WAN/ LAN.

Parameters that can be set using the push buttons include the manual setting of bandwidth, loss, and delay as well as selecting predefined network scenarios,

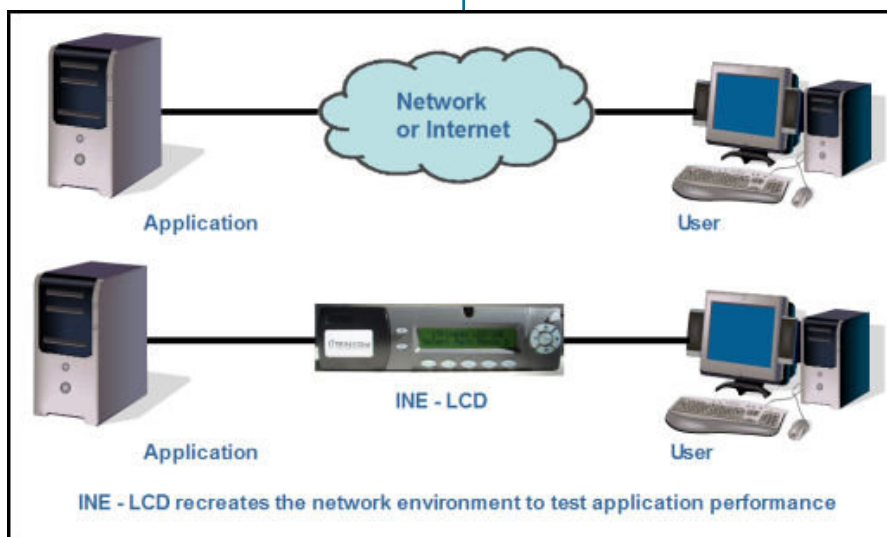
It is also possible to view throughput (packets/sec, bits/sec) on the front LCD panel as well as set IP addresses or DHCP.

### What Network Characteristics can be controlled?

INE - LCD allows you to control all the major network parameters that affect application behaviour in networks:

**Bandwidth/Link Speed:** e.g. T1, E1, Modem, (A)DSL, GPRS, 3G, Satellite etc., down to as low as 1bps.

**Delay (Latency):** How long the network packets take to reach their destination e.g. inter city, nationally, internationally or over wireless networks like GPRS, 3G or WiMAX.



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**Jitter:** How much variation there is in the delay, which can have a profound effect on applications like VoIP, and live Video over IP etc.

**Loss:** How much data is lost by the network, for example in wireless networks and some types of WAN data, losses may be as high as 10% or even more.

## Symmetry & Asymmetry

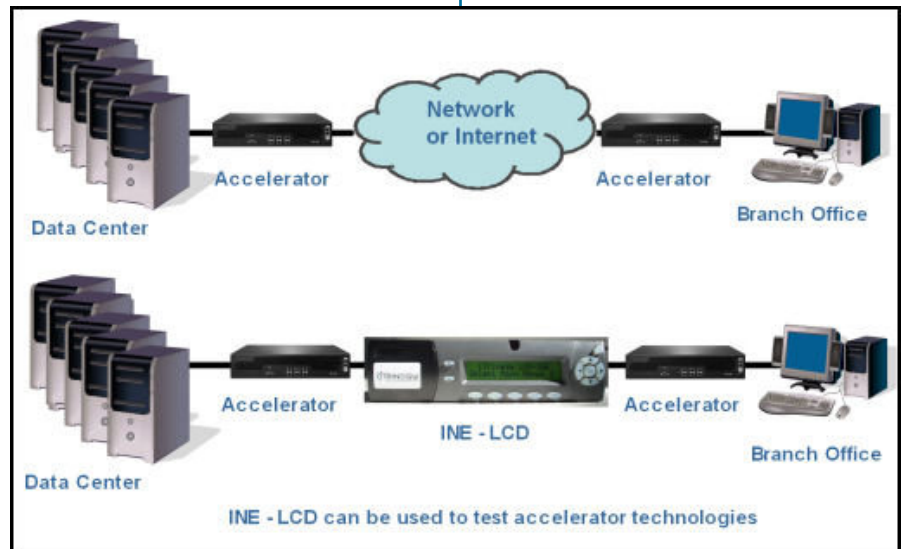
All of the above parameters are controllable asymmetrically as well as symmetrically i.e. you can have separate values for data leaving the target system or device compared to data arriving at the same system or device helping to make the test conditions as realistic as possible.

## Pre-loaded Network Scenarios

While it is simple to create network environments "on the fly", INE-LCD can also be loaded with predefined network test scenarios. So whether you wish to replicate international satellite links or connections to mobile devices, all you need to do is select the desired scenario from the LCD panel and press OK to start running your test.

## Set-Up is Simplicity Itself

INE-LCD is extremely easy to use: Just plug it inline between systems (computers/devices) you want to simulate a WAN between, create your required network characteristics or choose your WAN scenario (see above) from the LCD panel and press OK to begin the test process.



## Real-Time Adjustments

INE-LCD enables you to make adjustments to the network parameters in the middle of a running emulation so there is no need to stop the test and reset the required condition. This makes it the ideal wan emulator for conducting live "show me how" tests of network and application acceleration technologies.



## The iTrinegy Network Emulator Product Range

INE LCD is part of iTrinegy's comprehensive range of INE network emulator products designed to suit the needs of Application Developers, QA and Test Specialists, Network Professionals, IT Purchasers, Sales, Pre-Sales and field-based personnel.

The range includes:

**INE for Windows** - Network Emulation software for installation on to your Windows desktop.

**INE Compact** - The small, silent desktop network simulator

**INE Enterprise** - A high-end, multi-site, multi-path, multi-user network emulator.

**INE Ultra** - A high speed, high volume network emulator for very large scale testing

**INE Companion** - For network analysis capabilities, packet generation, capture, decoding and replay.



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