



**Convergent Service Analyzer**



**Handheld Modular  
Triple-play Testing**





  
**Convergent Service Analyzer**



## *Assuring Convergent Technologies*

Strong demand and growth in broadband services worldwide along with the development of NGN Telecom Triple-Play services is putting ever higher demands on telecom test equipment. To deliver higher bandwidth and real-time services such as IPTV and VoIP, telecom service providers must aggressively deploy last-mile networks with advanced high-speed DSL and fiber optic links. The number of installed broadband connections worldwide continues to multiply.

Customers' demands for high performance internet connections means that successful telecom operators must employ state-of-the-art test equipment at prices that maintain their market advantage. AnaCise Testnology invests significant efforts into developing and producing instruments that enable these telecom operators to better manage both operational and capital expenditures.

## *An Anticipated Achiever, CSA*

AnaCise's CSA is a technological marvel with several breakthrough functions and specifications. By leveraging the latest and most efficient integrated circuits, it exceeds all demands of Triple-Play testing requirements within your budget and costs only a fraction of the value it will bring to your organization.

In an entirely new approach to engineering, the CSA's unrivalled compact profile conveniently serves any test site and addresses every layer of testing with accuracy.

As a Linux-based device, AnaCise's CSA is the most flexible handheld test instrument on the market. It is easily embedded with special applications built uniquely for your organisation, eliminating the need for further expenditure on laptops.



### **AnaCise offers true Handheld Triple Play Service testing**

The CSA is a handheld test platform that ensures daily operation in legacy networks. It migrates into the new and challenging world of Triple-Play Networks seamlessly, supporting ADSL, VDSL, GigE, PDH and NGN SDH as the founding technologies.

The CSA's distinctive modularity is future-proof. New modules are easily added as network architectures and test responsibilities progress.



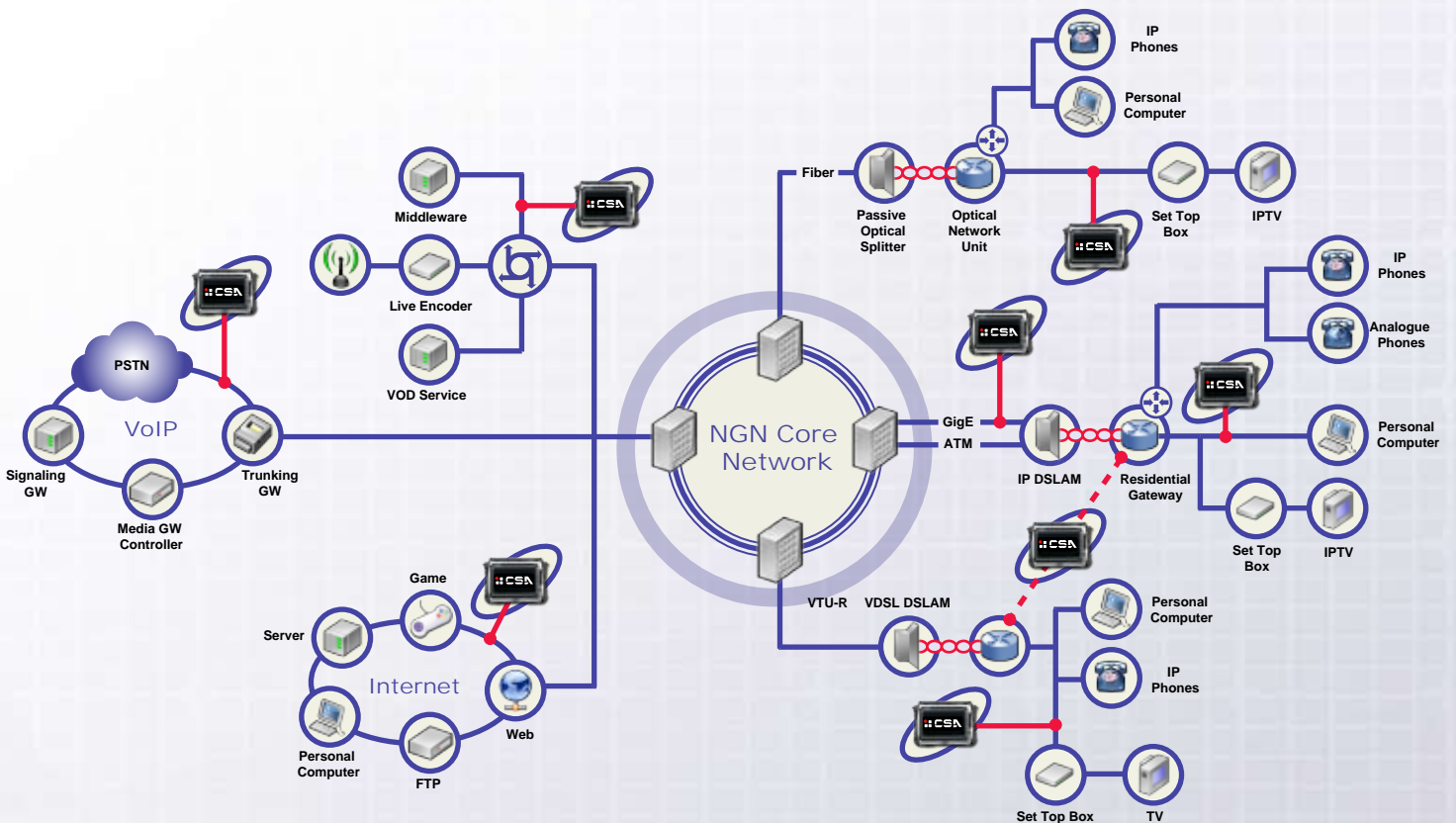
# CSA Key Features

AnaCise's CSA is a modular platform suited for copper and multi-services testing. Ruggedly constructed yet lightweight and with longer battery life, the CSA is a cost-effective test platform that easily scales to any testing needs.

- Field installation
- Maintenance
- Troubleshooting
- Provisioning

AnaCise's CSA provides easy testing for multiple Data, Voice and Video services. It is a scalable, future-proof solution that can move between Circuit Switched to Packet Switched migration and may be economically deployed nationwide within your network. AnaCise is at the forefront of integrating new standards, thus the CSA may also be deployed worldwide while meeting local telecommunications specifications standards.

<ul style="list-style-type: none"> <li>• Linux-based open platform ensures readiness for tomorrow's applications today</li> <li>• 7-inch, large graphical colour TFT LCD display</li> <li>• Easy-to-use touch screen with multiple-language user interface as well as auxiliary robust operation keypad.</li> <li>• Swappable battery-powered operation of up to 12-hours with best-in-class battery management system</li> <li>• Rugged construction, lightweight (&lt;1.5 Kg), ready-to-go design</li> <li>• Built-in Ethernet switch for traffic analysis in Convergent Technologies</li> </ul>	<ul style="list-style-type: none"> <li>• 10/100Mbps Ethernet, mini USB and MMC slot for external connectivity</li> <li>• Built-in speaker with stereo headset and microphone ports.</li> <li>• Ships with a large optional selection of popular applications such as an internet browser, telnet, text editor, media player and image viewer</li> <li>• Modular design with ADSL Triple Play, GigE Triple Play, PDH/NGN SDH Convergent and VDSL Triple Play Platform Interface Modules (PIM)</li> </ul>
--	---



# Platform Overview

AnaCise's CSA packs maximum potential into minimal dimensions. With smooth lines and a sleek overall design, the CSA has the elegance of a well-crafted ultra-portable tester. The gun metal casing with carbon black all-round bumper combines a handy profile with lightweight resilience.



Most complete set of test applications.

Best-in-class LED information on Platform Interface Module (PIM).

7-inch TFT LCD 65K colour screen: easy to operate touch screen menu.

Rubber Keys, for fast operation or glove operation in cold environments.



Rugged construction, sustaining hard bumps and jolts.

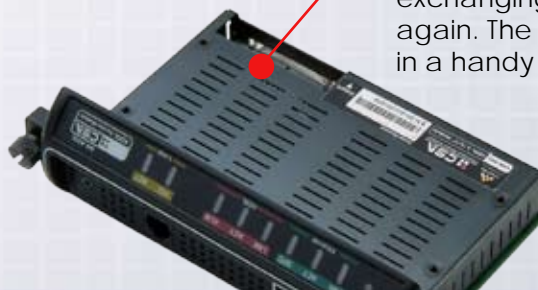


2 x mini USB slots, 2GB MMC card storage slot, 10/100Mbps Ethernet port, microphone and loudspeaker connectors.

Attach Adjustable Hand Strap to secure the CSA in your hand and make CSA more "Handheld" especially in the field.

Speedy field-swappable Platform Interface Modules(PIMs) swap between an ADSL Triple Play PIM and GigE Triple Play PIM in less than minutes, including powering down, exchanging modules and booting up again. The modules are conveniently stored in a handy CSA protective carrying case.

Need not to open side cover. Just open the small rubber cover for the external power supply connecting to the DC-IN power connector.



# Intuitive User Interface

## Operating Status

Operation flow states with PASS/FAIL indication plus elapsed time in ms resolution.

## Log Status

Indicates all Alarm/Event log information with time stamp while CSA is performing Test Scheduling.

## Timing Status

Displays test start time, remaining or elapsed test time and a bar indicating test activity.

## Mode Status

Indication of the success or failure in the selected test application.

## Alarm/Events Status

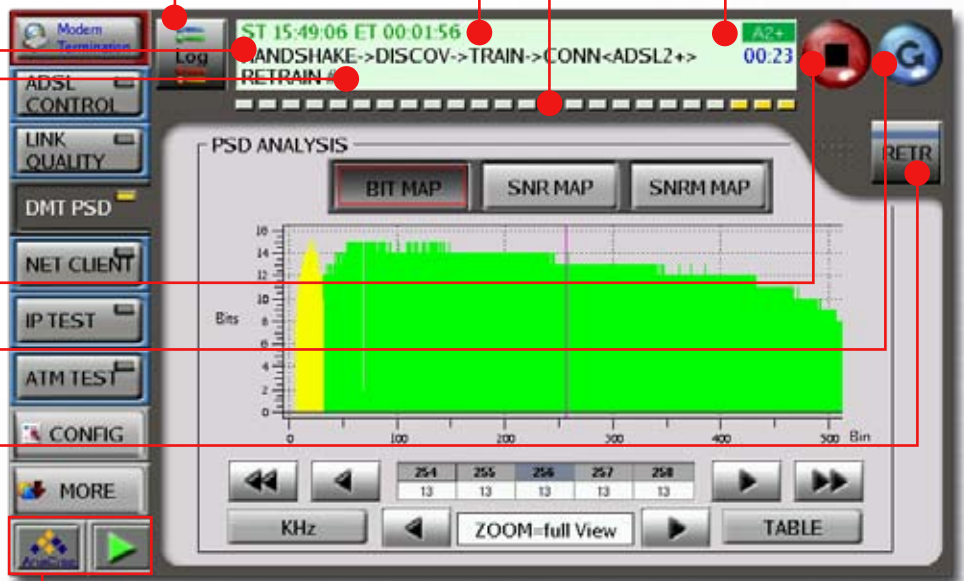
Instant Alarms/Events reporting on any occurrence under test.

## Control Area

**Start/Stop :** Control a Start/Stop of test.

**Reset :** Reset status of LEDs, Alarm/Events and Results.

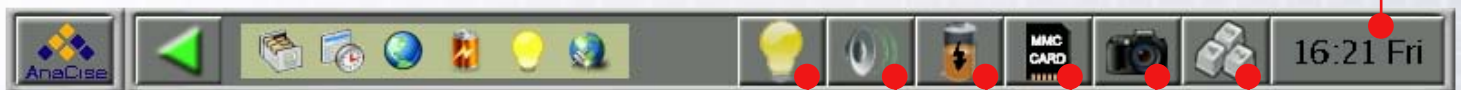
**Function Key :** Additional function.



## System Status

CSA true multi tasking abilities enable you to run many different applications at the same time. Perform swapping between running applications simply by touching large buttons on this system bar, and, if needed, hide away the system bar (User may set it to auto hide) to show more. System bar also offers conveniently placed shortcuts to frequently used functions like; keyboard, Screenshot, MMC card, Battery charge status, and an indicator showing how much time it takes to add an application.

## Realtime Clock/Date/CSA Version Indication



Brightness



Volume



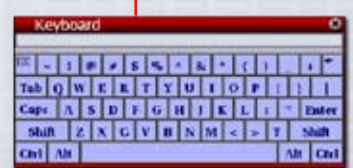
Battery



MMC Card



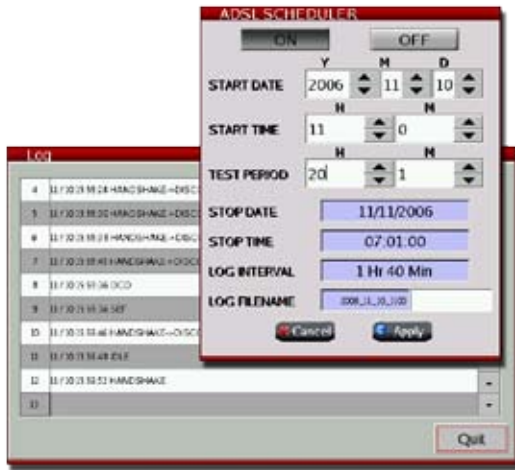
Screen Shot Storage



QWERTY On-Screen Keyboard

# CSA Takes Flexibility One Step Further

A good job at testing means more than on-screen results. AnaCise's CSA has an extensive logging function, where all events and alarms are saved to a log file. You can also save real-time screenshots along for more detailed reporting and documentation later on.



## Test Scheduling

AnaCise's CSA features an entirely new approach to test scheduling. The time/date of tests may be scheduled, executed or run as independent tests. With Log file for a fully automated test installation process. This is yet another feature that sets new standards within the handheld test equipment market.



From time to time, a customer may demand a printout of a test report, or need to print the test report in the office. AnaCise's CSA handles this request easily with built-in support for over 300 printer models.



## Test Administration

When your work is completed, you can save the test report including 65K colour screenshots of the results page of the MMC card. You can then read the files on your PC at the office or FTP the files to the C.O.



## Multi-Language

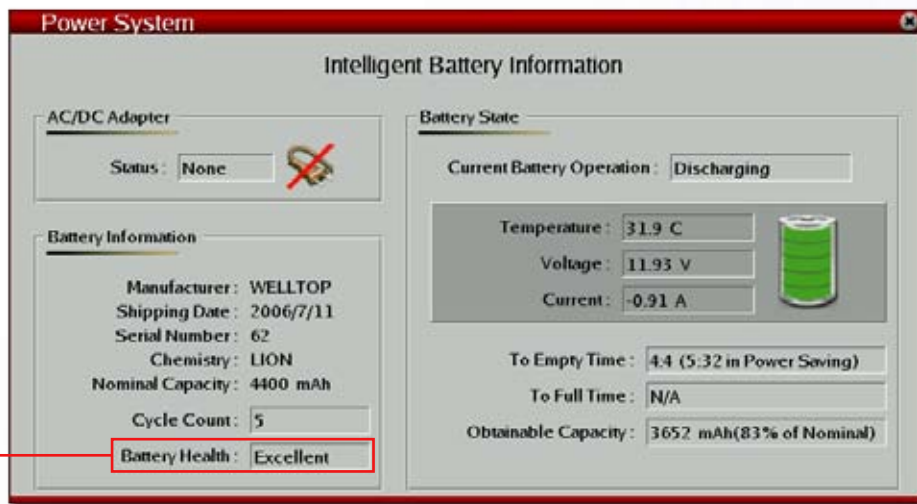
The CSA supports multiple languages to be adapted with your needs.

## Powerful Mobility

AnaCise's CSA offers powerful performance on the move. Its lithium-ion battery delivers up to 12-hours of running time. An intelligent battery management system gives you the advantage of always knowing how much running time is left before it needs another charge, how long until the battery is fully charged and how many times the battery has been charged to date. This information gives you advance notice of when the battery should be replaced so you are always well prepared.



The battery lasts up to 12 hours under testing conditions using a field-swappable lithium-ion battery with extensible power management features.



AnaCise's CSA provides detailed information on the battery. It calculates the health of the battery – ranging from Excellent to Replace Battery – and lets you plan the perfect battery replacement time.



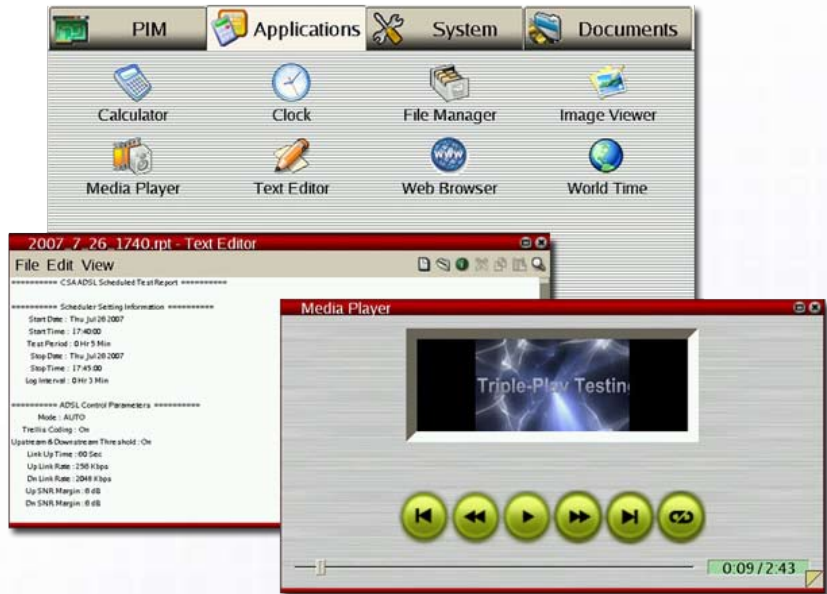
## Interactive Human Touch

A full 7-inch interactive TFT LCD touch screen promises unprecedented clarity for reading tables and graphs, eliminating stress to users' eyes. The stylish graphical user interface is second to none in terms of user-friendliness. The set of rubber control buttons enables you to operate AnaCise's CSA under difficult conditions, such as when using gloves in cold environments. This dual-control feature further enhances the CSA's ease of use, a trait that is present in all areas of the CSA platform and operating system.

# CSA Standard and Optional Advanced Platform Applications

AnaCise's CSA ships with a comprehensive set of applications. Scientific Calculator helps with complex calculations. Add Local Language and World Time support to all of the above, and you'll see why the CSA is more than just a test instrument.

On top of these, the CSA features a powerful list of Optional Advanced Platform. The CSA's Text Editor may be used to view text log report files or to write quick notes. The Media Player can play both audio and video tracks. Most popular formats are supported, including MPEG-4, \*.wav, \*.mp3, \*.avi, and \*.wma. The Konqueror web browser on the CSA is HTML 4.01 compliant and accepts Netscape plug-ins. It is the most pervasive web browser used in Linux-powered computers and devices. Image Viewer can view still images in \*.jpeg, \*.png, \*.gif and \*.bmp file formats.



With standard Web Browser applications you have the opportunity to save a lot of money in software licenses and you avoid the hassle of carrying a laptop with you to the customer's site. AnaCise's CSA's open LINUX architecture packs all your important software applications into one device.

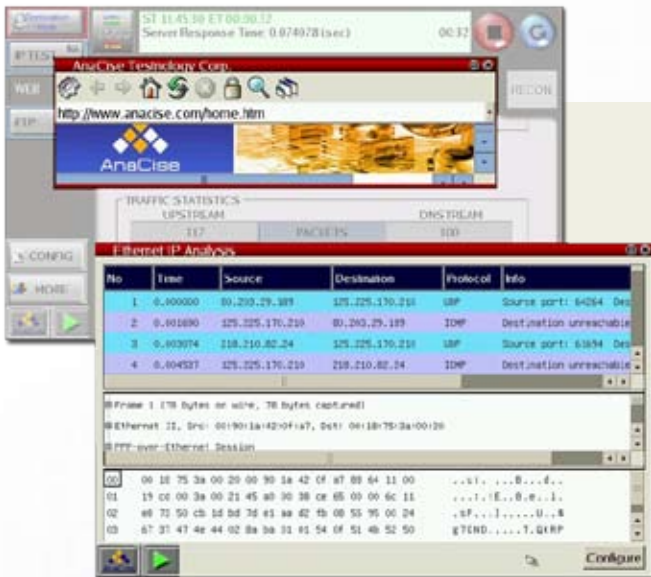


Use the HTTP web browser to configure your CPE, verify settings or make a quick check of the SNR or line status. Document your work with the screenshot feature.

# NGN Optional Triple Play Application

Driven by the Linux operating system, AnaCise's CSA supports some of the most powerful Triple-Play software applications available for expert analysis. When using Platform Interface Modules (PIMs) like ADSL Triple Play PIM, GigE Triple Play PIM, VDSL Triple Play PIM, or PDH/NGN SDH Convergent, a world of advanced analysis is unleashed.

Simply add the desired Triple-Play software option to a CSA interface module like ADSL Triple Play PIM and GigE Triple Play PIM, and you are ready to be commissioned to a customer's site for installing set-top boxes for IPTV. With AnaCise's CSA, you may verify the live video feed by running the IPTV analysis software on the Triple Play PIM. Please see the separate brochures for more information.



**TPAS-Data EIPA** (Ethernet IP Analysis) is a protocol analyzer and used for troubleshooting, analysis, protocol development, and network protocol learning. IST (Internet Service Test) contains HTTP Web Browser test and FTP Performance Test. INT (IP Layer Test) features Statistics Confirms the stability of lower layers by performing PING tests.

The **TPAS-VoIP** application features automatic VoIP signaling flow decoding, evaluation of packet delay variation, packet loss and Jitter as well as real time MOS per call indication. Yet, **TPAS-VoIP SIP** is used to make phone calls and simulate SIP phone.



Option PIM-1XX-SWLAN is a wireless LAN network test adaptor emulating the WLAN client to scan for the signal presence of 2.4 GHz, and detect the all of WLAN networks available in range. Furthermore, it also measure the quality metrics of network selected such as Signal Strength, Link Quality, Encryption and Connecting Rate status for an extended complete installation test of ADSL Triple Play PIMs from Wire-line to Wireless access with NO external PC required to host WLAN measurement.



The Rear Side of the CSA - A mini USB cable that is fastened in a mount holder has its one end connect to mini USB port and the other end to USB device.

## *C*omprehensive Telecommunication & IP Network Tests

The whole is indeed greater than the sum of its parts. Answering the needs of growing advancements in convergent technologies, the CSA offers some of the widest and deepest testing technologies in various selections of field-swappable interface modules. Some of the ever expanding selection of modules include ADSL Triple Play, VDSL Triple Play, GigE Triple Play, IPTV, VoIP, PDH and NGN SDH to name a few.

For product details, please refer to the individual technologies' Platform Interface Module (PIM) specification sheets.

## *A*bout AnaCise

ANACISE TESTNOLOGY is a Taiwan-based company with HQ office in Taipei. We are at the forefront of helping our customers shape the changing broadband convergent technology landscape.

AnaCise's solutions enable network operators and service providers to better meet increasing demands for network availability and services. We accomplish this by providing market-driven test, measurement and monitoring solutions that accurately verify network performance, thus ensuring perfect telecommunications network planning and service continuity.



### ANACISE TESTNOLOGY CORP

Fl. 3, No. 3, Alley 112, Ruei-Guang Rd.,  
Neihu Dist., Taipei 114, Taiwan, R.O.C.

Tel : +886-2-2792-8880  
Fax : +886-2-2792-8058

E-mail : [marketing@anacise.com](mailto:marketing@anacise.com)  
Web : [www.anacise.com](http://www.anacise.com)



### LOCAL CONTACTS