



AuroraForte



TrendCommunications

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ATM/UMTS

Testing for Next Generation Networks



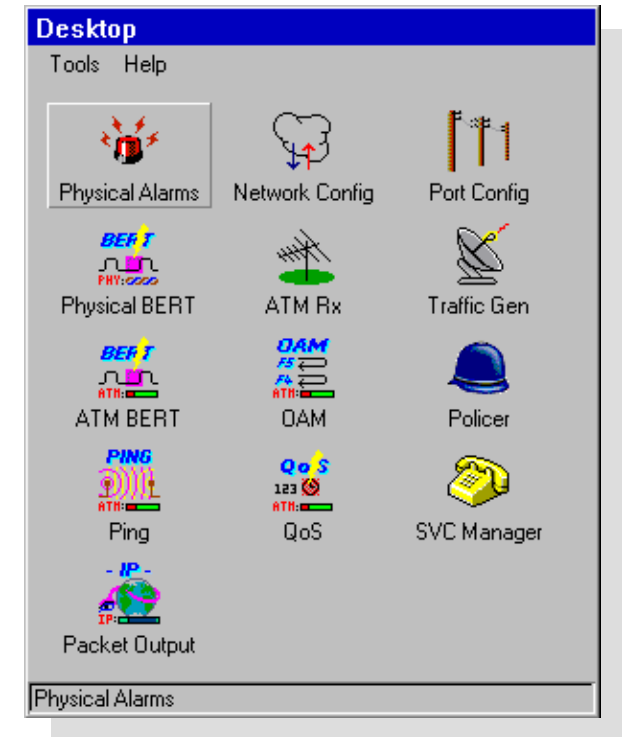
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- Portable tester with modular interface
 - ◆ E1+E3; E1+IMA; DS1+DS3; ATM-25; OC-3/STM-1; OC-12/STM-4
- Test procedures
 - ◆ Physical, ATM, IP
 - ◆ Proof of service reliability
- Easy to use:
 - ◆ Ideal for installation & Commissioning
 - ◆ Where speed and reliability is critical
- Advanced:
 - ◆ Detailed analysis for maintenance and fault finding
- Mature:
 - ◆ 4+ years market acceptance for ATM and DSL networks, 100s of units shipped
- Modern:
 - ◆ New developments to target 3G/UMTS market

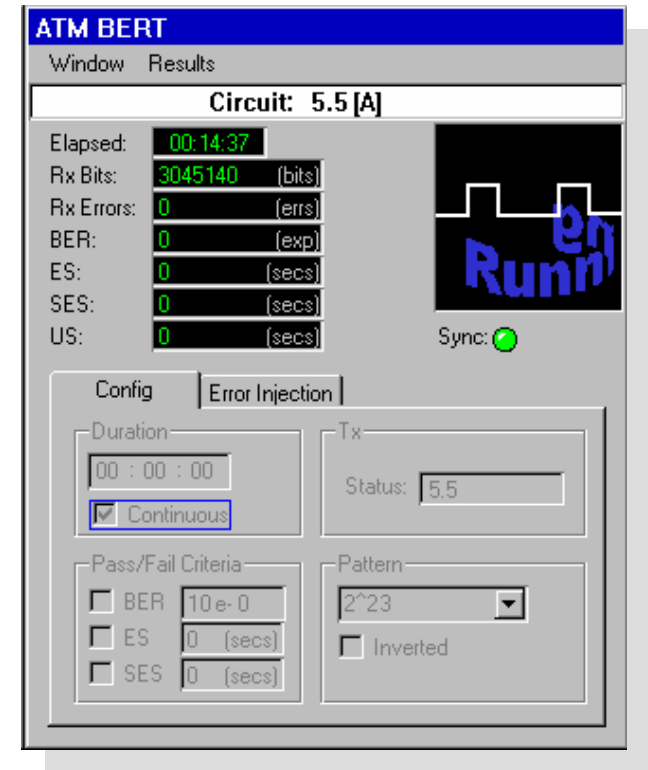


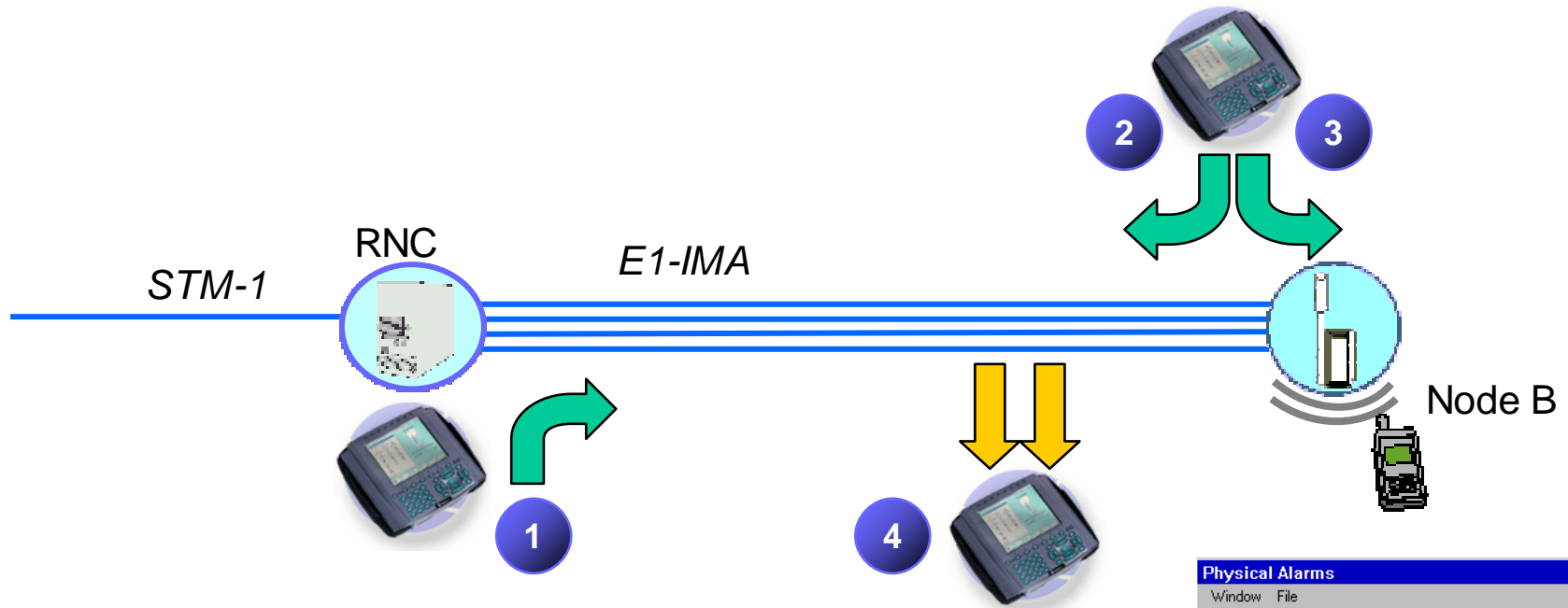
AuroraForte *Key Features*

- **Handheld, Battery-powered, Large graphical screen**
 - ◆ Rugged design for use in field operations
- **Windows type operating system**
 - ◆ Icon and function keys - No text menus
 - ◆ Amazingly quick to learn
 - ◆ Accurate and reliable measurements
- **Plug-in swappable interface modules**
 - ◆ Serial port for printing
 - ◆ Ethernet port for file syncing and Remote Control

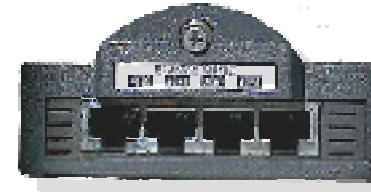


- Physical layer to Protocol layer testing and analysis
 - ◆ Traditional Telecom and Bit Error Testing
 - ◆ ATM layer traffic loading and analysis
 - ◆ ATM BERT
 - ◆ ATM QoS / O.191 test procedure
 - ◆ IP Ping over ATM
 - ◆ OAM / I.610 ATM fault analysis
 - ◆ Traffic policing congestion test / I.371
 - ◆ SVC signalling protocol emulation
 - ◆ IP Protocol real time analysis and decodes





- 1 Traffic test from RNC
- 2 Traffic test from Node B
- 3 Traffic test to Node B
- 4 Traffic monitor on live network



Physical Alarms

Window File

Port A : E1 IMA

PhySummary | **PhyAlarms** | IMALinks | IMAGroups

Link	2	
NE Tx State	Active	
NE Rx State	Active	
NE Rx Failure	No Failure	
FE Tx State	Active	
FE Rx State	Active	
FE Rx Failure	No Failure	

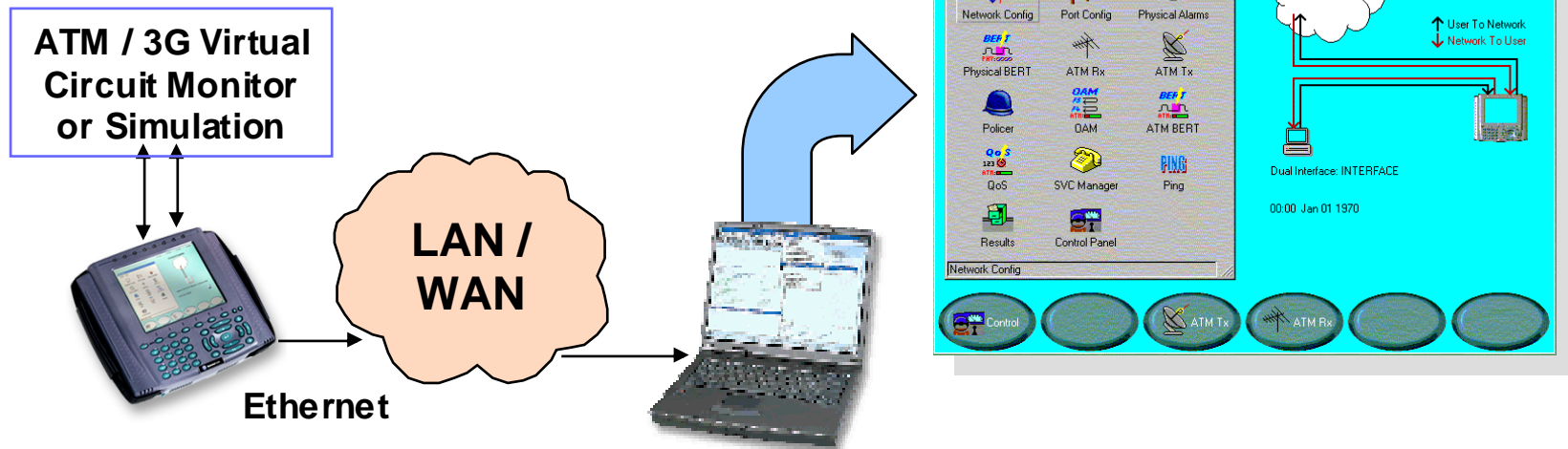
Link Summary

	1	2	3	4	5	6	7	8
Group1	Active	Active	Active	Active	Active	Active	Active	Active
LIF	Active	Active	Active	Active	Active	Active	Active	Active
LODS	Active	Active	Active	Active	Active	Active	Active	Active
DLY(ms)	0	0	0	0	0	0	0	0



AuroraForte *Easy to Use and Manage*

- File Manager
 - ◆ Store result and config files with on-board File System
 - ◆ Seamlessly transfer test results from Tester to PC
 - ◆ Text or spreadsheet format aids report writing, etc.
- Remote Control
 - ◆ ATM monitoring or simulation at a distance
 - ◆ Ethernet connection using IP
 - ◆ Operates over low bandwidth links
 - ◆ Same remote and local user interface



1. E1 installation testing - proves physical layer is OK
 - ◆ E1 physical alarm logging
 - ◆ Network Clock Synchronisation monitoring
 - ◆ E1 traditional Bit Error Rate Test

2. VCC route testing - proves ATM network is OK
 - ◆ Multiple VCC transmission to simulate network traffic loads
 - ◆ OAM loopback protocol simulation and decode for route verification
 - ◆ ATM QoS procedure to verify network reliability and delay times

3. ATM network scanning - discover network activity
 - ◆ Bi-directional monitoring of network links
 - ◆ Identification of all active VCCs
 - ◆ Live data rate statistics for up to 1024 VCCs



4. IP route testing - proves VCC is routed to correct device
 - ◆ IP Ping transmit or respond to verify IP over ATM configuration
5. Monitoring the AAL2 and AAL5 layer
 - ◆ Traffic type identification
 - ◆ Protocol decoding
6. Remote testing - detailed knowledge at a distance
 - ◆ Skilled operation from the central office
 - ◆ Detailed monitoring of remote sites



AuroraForte *Product Summary*

- Handheld, portable, battery powered
- Multi-interface: 2 interface ports, user changeable
 - E1 + E3
 - DS1 + DS3
 - ATM-25
 - OC-3/STM-1
 - OC-12/STM-4
- Large colour LCD, plus LED indication, Graphical user interface
- Physical layer testing
- ATM layer testing up to 1024 cell streams
- IP Ping over ATM
- Ethernet port for Results and Config management from PC, Remote Control and software upgrades

