Touchstone®
Universal CPE Test Station

Application
The Touchstone Universal CPE Test Station (UCTS) is a comprehensive test bench solution designed to assist operators in qualifying the functionality of cable modems and embedded multimedia terminal adapters (E-MTA) returning from the field for any number of reasons. The Touchstone UCTS is capable of simultaneously testing up to eight DOCSIS® compliant devices at a time.

A Complete Test Solution for VoIP Subscriber Premise Equipment
Leveraging our rich heritage in the development of world-class subscriber premises equipment, ARRIS is pleased to offer a complete solution for the efficient testing and reclamation of Cable Modems and Embedded Multimedia Terminal Adapters (E-MTA). The Touchstone UCTS offers the call agent, CMTS, and provisioning functions all rolled into a single chassis solution – thereby enabling the operator to fully test subscriber equipment without connecting to or otherwise simulating their operating environment.

Easy-to-Use, Flexible Software – Customize for your Unique Deployment

The UCTS employs custom software that can be managed via a straightforward graphical user interface. The administrator can set up to four unique access levels, and device profiles can be easily defined to customize the platform to test only those devices deployed in your network. All testing is driven by the user interface, which clearly prompts the user every step of the way. Tests can be most simply driven using a scanner device, eliminating the possibility of manual input error. Little to no DOCSIS or PacketCable experience is required.

ARRIS has further expanded the UCTS functionality in the new UCTS Release 2.0 software release. This release provides many operational enhancements and addresses interoperability issues with other DOCSIS certified devices. Highlights include automated call testing and device provisioning, customizable report generation, ARRIS CPE age detection, and increased CPE coverage for other DOCSIS devices.

Comprehensive CPE Capital Management
Whether returning from the field as a “failed unit” or as part of normal service churn, the UCTS provides a means to identify quickly and accurately the operational status of your CPE. This translates to an improved installation process, ability to avoid the costly accumulation of stranded CPE “bonepiles”, and tangible savings in shipping / handling, possible “no problem found” charges, and lost revenue opportunity.

With the ARRIS UCTS, there is no need to have separate test stations per CPE device – test all of your DOCSIS compliant cable modem and embedded multimedia terminal adapters using one station!

There is no longer a need to keep records of CPE field failure history. The UCTS maintains a complete database of test records, vigilantly watching for “repeat offenders,” so that operators can make informed RMA decisions. The UCTS even takes the difficulty out of the RMA process by printing a test report, which can easily be affixed to any failed CPE that is to be returned to the vendor.

- **Eliminate all stranded capital! Get cable modems and E-MTAs back into the field and generating revenue quickly!**
- **Complete, stand-alone system. No connection to plant or back-office required.**
- **Test any vendor’s cable modems or E-MTAs with user-definable profiles!**
- **Simple to use! Click + scan tests. Little or no PacketCable / DOCSIS knowledge required.**
- **Simple manipulation of test records. Watch for “repeat offenders” and print test reports for simplified RMAs.**

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Specifications

Physical:	Operating Temperature °F (°C)	50 to 104 (10 to 40)
	Operating Relative Humidity(Min.-Max.)	10-90% (Non condensing)
	Storage Temperature °F (°C)	-40 to 140 (-40 to 60)
	Color	Black
	Dimensions (H x W x D) in.	68.0 x 22.1 x 32.4
	(cm)	(172.7 x 56.1 x 82.3)
	Weight lbs (kg)	383 (173.7)
Interfaces:	RF Interface	Sixteen (16) External 'F' type connectors (8 active, 8 for future growth)
	Data Interfaces	Eight (8) 10/100 Base-T Ethernet RJ-45 Eight (8) USB 1.1, Series B Receptacles
	Telephony Interface	Sixteen (16) RJ-11
	Input Power (nominal):	
	NA Variant:	100/120 Vac, 50/60 Hz, 8 amps, NEMA 1-15 Plug
	Euro Variant:	220/240 Vac, 50 Hz, 6 amps, CEE7 Plug
	Power Interfaces (for UUT):	
	NA Variant:	Eight (8) NEMA 1-15 Receptacles, each w/ switch and 2.0A breaker
	Euro Variant:	Eight (8) CEE7 Receptacles, each w/ switch and 2.0A breaker
	Keyboard	PC PS/2 Keyboard
	Monitor	17" LCD Flat Panel Monitor
	Mouse	PS/2 Mouse
	Scanner	PS/2 Barcode Scanner
	Printer	Desktop PC Label Printer
Operating Systems:	PC System #1 (GUI)	Windows XP Professional, Service Pack 2
	PC System #2 (Call Agent)	Fedora Core 2 running ALPS v9.1
	Cadant C3	SW Version 4.1.0.27, ARRIS CLI Version .02
PC System Details:	CPU	Intel 2.0 GHz, 400 MHz FSB, 478 in, Pentium IV
	Motherboard	Pentium IV, 865G chipset, AGP, PCI ATX
	Memory	512 MB LP CL=2.5 NON ECC 266 MHz RAM
	Drives	Single ATA/133, 7200 RPM, 80 GB IBE Hard Drive 250 MB, internal ATAPI ZIP Drive 52X, CD-ROM IDE Drive
	Interfaces	Two (2) 4-port Ethernet Adapters Two (2) quad-port, PCI USB Cards One (1) NI PCI-6224 DAQ Card (32 analog + 48 TTL/CMOS digital I/O) Single-port RS232 Interface Card
	NI PCI 6224 (DAQ) Analog Input Resolution	16 bit
	NI PCI 6224 (DAQ) Input Range	+/- 10v per channel
LC Interface Box:	Attenuation	6:1 ratio
	Accuracy	+/- 5%
	Line Termination	4 REN (NA variant), 1 REN (Euro variant)
	Line Multiplexing	8 lines (simultaneous)
	Operating Voltage	120 VAC
	Frequency Response (Hz)	100 to 5000
	Ringing Voltage (V max)	100
	Ringing Frequency (Hz max)	100
RF Interface Box:	Frequency Range (MHz)	DC to 650
	Impedance (ohms)	75
	Through Loss (dB)	21.5 (+/- 0.5)
	Operating Voltage	12 VDC
	Step-to-Step Accuracy (dB)	+/- 0.1 below 30 dB +/- 0.2 below 60 dB +/- 0.3 below 80 dB +/- 0.4 below 95 dB +/- 1.0 below 127 dB

Ordering Information

ARRIS Universal CPE Test Station
(DOCSIS 2.0,
110VAC 50/60 Hz Power Supply
& NEMA 1-15 Plug) 719304

ARRIS Universal CPE Test Station
(Euro-DOCSIS 2.0,
220VAC 50 Hz Power Supply
& CEE 7/16 Plug) 719305

Spare RF Interface Box
(for use w/ ARRIS Universal
CPE Test Station) 719376

Spare LC Interface Box
(for use w/ ARRIS Universal
CPE Test Station) 719377

Spare Cadant C3 CMTS
(configured for operation in
the ARRIS Universal CPE Test Station) 713918

UCTS Release 2.0 Software Upgrade
(CD-ROM software upgrade
including auto provisioning,
configurable reports, etc.) ..... TBD

UCTS Call Automation Testing Upgrade
(Includes PERL Modem card,
connectors, installation
manual and instructions,
requires UCTS Release 2.0 software) 721180

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