



JDSU HST-300C CUADSL2 Specs Provided by www.AAATesters.com

HST-3000 Handheld Services Tester

Benefits

Infineon ADSL2+/VDSL2 SIM



- Saves money and reduces repeat faults with Triple-Play services testing that supports ADSL1, ADSL2, ADSL2+, VDSL2 (VDSL2 up to 30a profiles) with one module
 - Provides BPT, Hlog, and QLN graphing, simplifying isolation of bridged taps, noise, and pair balance problems
 - Emulates both modems (ATU-R/VTU-R) and DSLAMs (ATU-C/ VTU-C) to test both directions of the span
 - Interoperates with the widest range of chipset manufacturers, such as Broadcom, Infineon, and Ikanos, reducing the costs of carrying multiple test modules
 - Enables data and services layer testing via PPPoE, PPPoA, IPoE, FTP throughput, web browser, VoIP, and IP Video, making it the right tool for Triple-Play testing
 - Choose an optional wideband copper pair module that tests up to 30 MHz for VDSL2

Qualifying a very high speed Digital Subscriber Line (VDSL) service that can transport high definition television (HDTV) and triple-play services requires more than a simple Go/No-Go tester. One lightweight, robust, battery-operated JDSU HST-3000 tester equipped with the Infineon Technologies ADSL/VDSL2 module offers more capability than any other handheld tester on the market. This tester gives both technicians and telco engineers the confidence and the necessary power to complete the job, and get it done right. With one tool, they can test and troubleshoot asynchronous DSL (ADSL)/VDSL2 circuits by emulating either the customer modem (ATU-R/VTU-R mode) or the DSL access multiplexer (DSLAM) (ATU-C/VTU-C mode).

Designed for the outside plant, the Infineon service interface module (SIM) also supports legacy ADSL1, ADSL2, ADSL2+, VDSL1, and VDSL2, making it easy and efficient for technicians to switch between testing technologies without having to swap modules. The Infineon SIM also features powerful Hlog and quiet line noise (QLN) to simplify identifying hard to find noise, crosstalk, pair imbalance, bridged taps, and other copper plant anomalies. The Infineon SIM is also available with dual tip/ring/ground (A/B/E) interfaces for basic and advanced copper trouble-shooting to further isolate copper pair problems.

Lightweight, rugged, and battery-operated, the HST-3000 with the Infineon SIM cost-effectively scales to provide an all-in-one solution for field installation, maintenance, and troubleshooting across a wide range of triple-play service test applications.

Efficient, All-in-One Tester

The new Universal xDSL SIM for the HST-3000 tests ADSL1, ADSL2, ADSL2+, VDSL1, and VDSL2 using just one module with Annex A or Annex B compatibility. In addition, this new release can emulate either the customer modem (ATU-R/VTU-R mode) or the DSLAM (ATU-C/VTU-C), making it compatible with a huge range of customer premises (CPE) and DSLAM equipment. Service providers can minimize the costs of their investment in test equipment as well as in DSLAM ports by continuing to offer high-speed data service over single-pair ADSL2+ while turning up new Internet Protocol (IP) video service tiers as they qualify new VDSL2 service areas. JDSU also features additional modules utilizing the widest range of DSL chipsets available on the market, such as Infineon, Ikanos/Conexant, Texas Instruments, and more. A wide range of chipset compatibility allows providers to verify interoperability and to analyze real-world rate-versus-reach performance between the DSLAM and the CPE.



Figure 1: Isolate faulty ports and segments with xTU-R and xTU-C mode connections

🌾 VDSL General Settings 👘 🕆 🖥			
CONFIG->MODEM->GENERAL			
P	ress HOME to go back to Results		
01 - DSL Type vтu-c	06 - Annex Auto		
02 - Transport РТМ	07 - Profile 8a		
03 - Auto Sync	08 - DSL Interface		
04 - Standard	09 - Bitswapping Upstream ON, Downstream ON		
05 - Compatibility Default	10 - Event Log Size		
	more 🔻		
GENERAL LOAD CFG	SAVE CFG		

Figure 2: Easy setup for VDSL device type, Transport mode (ATM/PTM), and Annex (A/B), among others.

			3, 1		
		Est. ength 1k ft		Data VDSL2 VTl	Off 8b J-R
	Show Time		UP	DOV	٧N
I	Actual Rate	30	08 K	16060	K
	Max Rate	83	12 K	77421	K
	Capacity	36	6.2 %	20.7	%
	Noise Margin	- 13	3.0 dB	33.9	dB
	Line Atten	6	6.7 dB	7.4	dB
	Signal Atten	. 4	1.3 dB	7.4	dB
ĺ	Display 🔺	Res	ults 🔺	DSL Sto	p

Figure 3: VDSL2 Summary screen

Hlog (Insertion Loss) and QLN Graphs

The Infineon ADSL/VDSL SIM adds powerful new Hlog and QLN graphs to this release. When troubleshooting xDSL services, technicians can view Hlog and QLN graphs to gain insight into trouble sources. A "dip" or "notch" in the Hlog graph indicates a loss in particular bin frequency and may indicate the presence of a bridged tap or a corroded splice, for example. The QLN graph indicates external noise interference where spikes may show noise interference issues impacting a particular band of interest. Users can zoom in or out on all graphs to isolate areas of interest, which provides a key benefit for pinpointing possible sources of trouble. After identifying the trouble source, technicians can find and correct problems using the HST-3000 advanced copper measurement suite, including the spectral analysis meter or precision time domain reflectometer (TDR) or resistive fault locator (RFL) tools.



Figure 4: Dual pair Hlog Graph showing likely bridged tap on pair 1 at tone 582.



Figure 5: QLN graph showing noise impacting downstream 1 bin

Specifications

ADSL/VDSL Infineon Module

Chipset Infineon

Standard Compliance

VDSL2 ITU-T G.993.2 Bandplans 8, 12, 17, 30 MHz; Profiles 8a/b/c/d, 12a/b, 17a, 30a(ATU-R/VTU-R); Plan 997, 998 ADSL1/2/2+ Annex A option (over POTS): ITU-T G.992.5 (ADSL2+), ITU-T G.992.3/4 (ADSL2), ITU-T G.992.1/2 (G.DMT) and ANSI T1.413 Issue 2 Annex B option (over ISDN): ITU-T G.992.5 (ADSL2+), ITU-T G.992.3/4 (ADSL2), ITU-T G.992.1/2 (G.DMT) Annex L (RE-ADSL) and Annex M

Modes

ATU-R/VTU-R and ATU-C/VTU-C

ADSL/VDSL2

Graphs
BPT
Combination BPT/SNR Tone
VDSL Band Statistics
Hlog
QLN
Miscellaneous results
Synchronization (Showtime)
Failed Synchronization
Number of Syncs
Training Time
Standard Used
Estimated Loop Length
Modem Firmware Version

Measurements Upstream/Downstream

Actual Rate
Max Rate
Capacity
Noise Margin
Attenuation - Signal, Line
Tx Power
Connect Method (ADSL only)
Interleave Delay
Actual INP
PSD



Specifications Cont'd

Band Statististics (per VDSL US/DS Band) Loop Attenuation Signal Attenuation SNR Margin

Network

Network Modes Terminate, Through (ATU-R/VTU-R) **Network Types** VDSL IPoE, PPPoE, Multiple VLANS, Data off ADSL/ADSL2+ IPoE, PPPoE, MVC Video, IPoA, PPPoA, Multiple VLANS, Data off Network off VPI/VCI IP Mode DHCP, static **MAC Setting** Factory default, User-defined Vendor ID Yes/No **User Class** Yes/No

VLAN

Tag On/Off ID Selection 0–4095 Priority selection 0–7

Modules HST3000-INF-VDSL

HST3000-INF-VDSL VDSL with Infineon Aware Chipset HST3000-INF-CuVDSL VDSL with Copper Services Module software HST3000-INF-VDSL-WB2 VDSL and Copper (up to 30 MHz) with Infineon Aware Chipset

Cables	
CB-3CLIP-BON	8 PIN modular to 3 clip leads (bed of nails
	(for Infineon/TI SIMs)
CB-3CLIP-RTC	RJ to 3 clip lead cable with regular telco clips
	(for Infineon/TI SIMs
CB-3LEAD-SAFE	RJ48 to 4mm plugs

Ordering Information

Base Unit

HST3000-NG	HST-3000 Mainframe without Copper (Color
HST3000C-NG	HST-3000 Copper Mainframe (Color)

Available SIMS (Modules)

HST3000-CUCE	Copper only SIM, CE Marked
HST3000-AR2A-T1	ASDL2+T1 (ATU-R, Annex A)
HST3000-AR2B-T1	ADSL2+T1 (ATU-R, Annex B)
HST3000-CAP-VDSL	Capri bonded VDSL SIM
HST3000-CAP-VDSL-WB2	Capri bonded VDSL/WB2 SIM
HST3000-CAR2A-T1	Copper, ADSL2+ TI (ATU-R, Annex A)
HST3000-CAR2B-T1	Copper, ADSL2+ TI (ATU-R, Annex B)
HST3000-CSHHV	G.SHDSL, 380V SPAN, DVOM SIM
HST-3000-CU Du	ual T/R/G Interface to Copper Test SIM
HST-3000-CUVDSL-CNXT	VDSL and Copper with Conexant
	Chipset SIM
HST3000-WB2 Wie	de Band 2 (up to 30 MHz) Copper Test
HST3000-VDSL-CNXT	VDSL with Conexant Chipset
HST-3000-VDSL-CNXT-WB	2 VDSL and Copper (up to 30 MHz)
	with Conexant Chipset
HST3000-VDSL-IK	VDSL with Ikanos Chipset
HST-3000-VDSL-IK-WB2	VDSL and Copper (up to 30 MHz)
	with Ikanos Chipset
HST3000-INF-VDSL	VDSL with Infineon Aware Chipset
HST-3000-INF-VDSL-WB2	VDSL and Copper (up to 30 MHz)
	with Infineon Aware Chipset
HST3000-ETH	10/100/1000 Ethernet
HST3000-CT1	T1 and Copper

HST3000-DC	Datacom
HST3000-E1	E1
HST3000-E1-DC	E1/Datacom
HST3000-4WLL	4-Wire Local Loop
HST3000-T1 Du	al TX/RX Bantam T1 Interface and T1
HST3000-T3	Dual TX/RX Bantam T1 Interface,
and Dual RX/	Single TX BNC DS3 Interface/and DS3
HST-BRA ETSI (Euro)	ISDN BRA
HST3000-BRI	ISDN BRI
HST3000-CSHCE	G.SHDSL and Copper
HST-GSH	G.SHDSL
HST3000-GSHCE	2-Wire G.SHDSL
HST3000-CSH	4 Copper, 4-Wire G.SHDSL
	(STU-R/C, Annex A/B)
HST3000-BLK	Blank
HST3000-BLK Software Options	Blank
HST3000-BLK Software Options HST3000-BLUET00TH	Blank Bluetooth Wireless
HST3000-BLK Software Options HST3000-BLUET00TH HST3000-C0S	Blank Bluetooth Wireless Class of Service
HST3000-BLK Software Options HST3000-BLUETOOTH HST3000-C0S HST3000-802.11	Blank Bluetooth Wireless Class of Service 802.11 Wireless
HST3000-BLK Software Options HST3000-BLUETOOTH HST3000-COS HST3000-802.11 HST3000S-WEB	Blank Bluetooth Wireless Class of Service 802.11 Wireless Web Browser
HST3000-BLK Software Options HST3000-BLUETOOTH HST3000-COS HST3000-802.11 HST3000S-WEB HST3000-REMOP	Blank Bluetooth Wireless Class of Service 802.11 Wireless Web Browser Remote Operation
HST3000-BLK Software Options HST3000-BLUETOOTH HST3000-COS HST3000-802.11 HST3000S-WEB HST3000-REMOP HST3000-SCRIPT	Blank Bluetooth Wireless Class of Service 802.11 Wireless Web Browser Remote Operation Scripted Test
HST3000-BLK Software Options HST3000-BLUETOOTH HST3000-COS HST3000-802.11 HST3000-802.11 HST3000-WEB HST3000-REMOP HST3000-SCRIPT HST3000-DSL2	Blank Bluetooth Wireless Class of Service 802.11 Wireless Web Browser Remote Operation Scripted Test ADSL2 and ADSL2+
HST3000-BLK Software Options HST3000-BLUETOOTH HST3000-COS HST3000-802.11 HST3000-802.11 HST3000-WEB HST3000-SCRIPT HST3000-SCRIPT HST3000-SL2 HST3000S-IP	Blank Bluetooth Wireless Class of Service 802.11 Wireless Web Browser Remote Operation Scripted Test ADSL2 and ADSL2+ Advanced IP Suite—PING and
HST3000-BLK Software Options HST3000-BLUETOOTH HST3000-COS HST3000-802.11 HST3000-WEB HST3000-WEB HST3000-SCRIPT HST3000-SCRIPT HST3000-SL2 HST3000S-IP	Blank Bluetooth Wireless Class of Service 802.11 Wireless Web Browser Remote Operation Scripted Test ADSL2 and ADSL2+ Advanced IP Suite—PING and Through Mode Support
HST3000-BLK Software Options HST3000-BLUETOOTH HST3000-COS HST3000-802.11 HST3000-802.11 HST3000-WEB HST3000-WEB HST3000-SCRIPT HST3000-SCRIPT HST3000-SL2 HST3000S-IP-Video	Blank Bluetooth Wireless Class of Service 802.11 Wireless Web Browser Remote Operation Scripted Test ADSL2 and ADSL2+ Advanced IP Suite—PING and Through Mode Support IP Video Analysis

HST3000-MSTV	Microsoft IPTV Video Analysis
HST3000-VT100	VT100 Emulation
HST3000S-VOIP	VoIP Software Analysis
HST3000S-H.323	H.323 VoIP Signaling
HST3000S-MGCP	SCCP MGCP VolP Signaling
HST3000S-MOS	VoIP Mean Opinion Score
HST3000S-SCCP	SCCP VoIP Signaling
HST3000S-SIP	SIP VoIP Signaling
HST3000-UNISTIM	VoIP Signaling Call Controls for UNISTIM
HST3000-OPTETH	Optical Ethernet
HST3000-IPV6	IPv6 Option for the Ethernet SIM
HST3000-MPLS	MPLS
HST3000-MSTR	Multiple Streams
HST3000-TCPUDP	TCP/UDP
HST3000-FTP	FTP
HST3000-WBTONES	WBTIMS
HST3000-PCMTIMS	TIMS (PCM)
HST3000-PCMSIG	Signaling (PCM)
HST3000-SPE	Spectral Noise
HST3000-RFL	RFL
HST3000-TDR	TDR
HST3000-PRI	ISDN PRI (NC Standard)
HST3000-ST	Basic Rate ISDN S/T (ANSI)
HST3000-T1DDS	DDS-T1
HST3000-TxIMP	Transmission Impairments
HST3000-FR	Frame Relay

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