

Broadband Test Set



**KURTH
ELECTRONIC**

KE3400



PC Application Software
Displays Graphical Results

- Tests ADSL, ADSL2, ADSL2+, and VDSL in one Compact, Rugged and Cost Effective Solution
- ATU-R and **ATU-C** Emulation
- Built in Ethernet Through-port
- IP Ping Test, V-LAN Tagging
- Voltage Test for Line Verification
- User Settable Parameters
- Stores up to 100 Test Results
- Download Capability to Local PC
- **(Optional) Application software for Graphical Display of Results**
- Built in Charge Circuit

ADSL – VDSL2 Testing! ATU-R and ATU-C Emulation!

Kurth Electronic's **KE3400** is an exciting new addition to its family of high quality test and measurement products. The **KE 3400** equips field technicians with a truly remarkable array of new capabilities for **xDSL** testing. Fast, durable, and easy to use, the basic **KE3400** provides DSL test capability for **ADSL1,2, and 2+** with the ability to upgrade via software to include **VDSL2** as well. The basic unit comes equipped to perform both **ATU-R emulation** as well as **ATU-C emulation**, allowing the technician to better isolate problems. This exciting new functionality also allows the installer to test the CPE even before the DSLAM is turned up, cutting installation time and allowing for more complete loop verification prior to turning up service. Basic functions like Up and Downstream speed, SNR, Power, FEC, HEC, and CRC measurements are standard. The **KE3400** can also be used as a modem replacement with its full speed throughput functionality. The built in IP Ping feature in PPOE, PPOA or LLC bridge mode helps

verify higher layer functionality. With VDSL it is possible to set V-lan tags and make tests in PTM or in ATM mode (optional). The unit is compatible with a variety of chipsets.

The **KE3400** is extremely easy to use with large LCD display and simple 7 button user interface. Up to 100 test results can be stored in memory with download capability to any standard PC or Notebook Computer via Ethernet Port. The embedded download functionality also allows the user to print results from the test set. Its embedded Ethernet port allows for real time testing with its optional **Live View** Software. The **"Live View"** software also enables graphical analysis of test results. The built in LiPo Battery allows the user to run the **KE3400** for over 4 hours continuous testing.

The **KE3400** is the most advanced DSL test unit on the market. Fast, Durable, and Easy to Use it is the product of choice for DSL testing.

Technical Data KE3400

A. Cable parameter Measurements

DC Voltage:
Line Voltage up to 199 V DC

B. xDSL Function

Emulation :
Modem Replacement with maximum throughput for ADSL and VDSL
Router for Link and PING test
DSLAM as CO or DSLAM replacement

ADSL Standards:

ANSI DMT	T1.413 issue2
G.DMT	G.992.1
ADSL-2	G.992.3
ADSL-2 Reach	G.992.3l
ADSL-2 All Digital	G.992.3M
ADSL-2+	G.992.5
Annex A and Annex B	

VDSL Standards:

VDSL 1	G.993.1
VDSL 2	G.993.2
PTM, ATM (optional)	

Chipset Compatibility:

Generic VDSL
Infineon
Ikanos
Broadcom
More under develop
ment (Upgrade)

Up/Down-stream test :

Indication of actual Bit Rate up to

Upstream	120000 kbps
Downstream	120000 kbps

Noise level (SNR Margin)

Attenuation	-64dB to +64 dB
Transmit level	0 to +127 dB
Interleaving Delay	-90 to 0 dB
Interleaver depth	in ms
Bits per Tone	in Frames
t	Real Time Graphical with Op tional "Live View" Software

Performance Parameter :

Errors :	F	EC, CRC, HEC
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Near End and Far End Loss:

Loss of Signal	LOS
Loss of Frame	LOF
Loss of Power	LPR
Initialization error	Lineinit
ATM error	LPO

IP Information

IP over Ethernet:
RFC 1483/2684 L LC bridging / routing mode,
static and DHCP IP Address

IP over PPPoE:
RFC 2516 PPoE (Static and Dynamic) with
PAP/CHAP PPP connection

IP over PPPoA:
RFC 2364 PPPoA

VDSL with V-Lan tagging

Test Results
IP PING statistic

number of transmit - number of
received packages
missing and unreachable addresses
delay and average time ,Max/Min.

LAN-Port RJ45 10/100 M auto detection
LEDs for Link, Data and Speed

C: Generally Data

Graphic LCD Display	64x28 LCD with backlite
Languages	German, English, Spanish
Connections	
Test port	RJ-11
LAN port	RJ-45
Power Supply	Built in LiPo Accu
Capacity	> 4 hours (In continuous test mode)
Low batt indication	Coloumb counter

Unit comes with :

AC Power supply and charger, Test leads RJ11-RJ45, RJ11-Banana
plug with rubber insulated crocodile clips, Crossconnect Ethernet cable
for PC-connection, Pouch made of rugged Cordura with additional
space. Windows Software for Download of results and Upgrade of
unit.

Optional:

Upgrade to VDSL
Car charger unit for 12V DC
Windows Software for Real Time Trace
Rubber protection boot (Available 01/08)

Dimensions

Size	250 x 110 x 50 mm
weight	650g
Housing	high impact resistant ABS
Display	protected by Plexiglas

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Order- Informations

0.49820	KE3400 xDSL Performance Tester ADSL1 - ADSL2+ for Annex A and Annex B
0.49820-10	KE3400 Firmware Upgrade to VDSL2
0.49820-15	Real Time Software Live View
0.49820-16	Car Charger for 12VDC

