

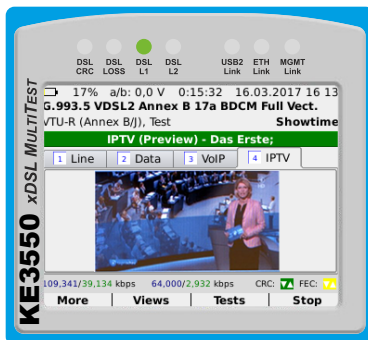
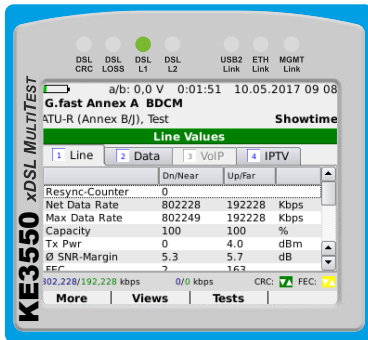
# Next-Generation-xDSL Multitester

Ready for **All-IP!**

The entrance for measurements in the broadband network



## KE3550



### At a glance

- New All-in-One handheld tester with modular system
- ADSL-VDSL2, VDSL2-Vectoring, Vplus, G.fast and Bonding in one device
- 1 Gb Ethernet ports
- Triple Play tests (Data, VOIP, IPTV) with transfer rates up to 700 MBit/s
- ISDN Uk0/S0, analogue and S2M test telephone functionality
- Copper test functionality, fully integrated cable fault meter with remote
- Bluetooth integrated
- Wi-Fi untegrated
- Optional touchscreen
- Intuitive operation
- 3.5" TFT display, sunlight readable
- Display scratch resistant through tempered protection glass
- Robust keypad
- High performance LiPO battery for up to 5 h continuous xDSL measurement
- Including software for managing and creating protocols and test sequences

The KE3550 xDSL *MULTITEST* is the latest evolution in the KE-*MULTITEST* series. In addition to all established features, it also has brand-new functions and functionalities like Wi-Fi testing, Bluetooth-supported data transfer as well as an optimized keyboard and shortcut keys.

A versatile and revolutionary xDSL tester for DSL services in ADSL1/2/2+ / VDSL2, Vectoring, Super Vectoring (Vplus) Bandplan 35b Annex Q and G.fast and bundled networks as well.

With a variety of interfaces the outstanding KE3700 xDSL Multitester supports many access network technologies. Accelerated fault diagnosis is made possible by its simple and fast operation. Interferences in the network, in outdoor and inhouse cabling as well as in CPE can be narrowed down quickly.

With the autodetect function of the DSL service, no choice between ADSL, VDSL or G.fast is necessary. Synchronization starts uncomplicated and all relevant measured values are clearly displayed on the large color display.

Automated and editable measurements on the copper pair allow fast and efficient work. Supporting this, control commands can also be sent directly from the tester to the KE905 Remote for the electronic remote switching of the measured cables.

The user-friendly entry level in the broadband measuring technology helps in the acquisition of the necessary measuring equipment!



# Options

## G.fast / Super Vectoring (Vplus) Annex Q

- Supports G.fast ITU-T G 9700/9701 up to 106 MHz
- Supports Super Vectoring (Vplus), ITU-T G 993.2 Annex Q up to 35 MHz

## VoIP Tests

- Terminal simulation and call setup
- VoIP connections over xDSL and Ethernet
- Extensive VoIP statistics
- Supports SIP Trunk and Multicalling

## IPTV Tests

- Set-Top-Box emulation
- IPTV connections over xDSL and Ethernet
- Extensive IPTV statistics
- Preview function and Multistreaming

## xDSL Bonding

- ADSL2+ and VDSL2 Bonding (ITU-T G.998.1/2)

## Gigabit Ethernet Ports

- Copper RJ45

## Coppertest with KECT

- **Prequalification of the copper lines up to 31 MHz:** Impedance, return loss, balance, LLC, NEXT measurement, receive level and spectrum, wideband noise and impulse noise
- **Telco multimeter measurements for troubleshooting:** Current, voltage, insulation, resistance and capacitance symmetry
- The **Loop analysis** summarizes the key measurements and automates the configurable measurement process
- **Remote:** The KE3700 sends commands directly to optional remote units, for example KE905, for comfortable remote switching of copper pairs at the far end of the line under test

## TDR functions (only in conjunction with KECT)

- TDR functions for precise fault detection and localisation (up to 6 km cable length with  $\varnothing$  0,5 mm)







## ISDN/POTS Test Telephone

- Handsfree function
- Port and self-testing call
- Extensive service query
- Detailed information on line status
- BER Test (Bit error rate test)
- High Impedance line monitoring



Icon	Type	Description
<b>xDSL MultiTester</b>		
0.49815	KE3550	xDSL Multitester, 1 GbE interface, ADSL 1/2/2+ and VDSL 2 Vectoring Annex A/B, 4 GB Memory, Bluetooth
<b>xDSL / High-Speed updates</b>		
0.49830-8G	Super Vectoring / G.fast	Upgrade VDSL2 Vectoring, Super Vectoring (Vplus) Profile 8a/b/c/d, 12a/b, 17a, 30a, 35b, Bonding; G.fast ITU-T G9700/G9701 106 MHz
<b>Coppertest upgrades</b>		
0.49830-13	KECT	Coppertest: xDSL Linie Qualification up to 31 MHz, Telco Multimeter, integrated Remote Control Functions with Line Test Assistants
0.49830-11	TDR	TDR up to 6 km (only in conjunction with KECT)
0.49830-20	RFL	Resistance fault localization, 0 to 3 kΩ via 3-wire method and Kūpfmüller bridge
<b>IP service tests</b>		
0.49830-5	VoIP	VoIP Tests (terminal simulation) with display of all relevant quality parameters
0.49830-6	IPTV	IPTV Tests (Set Top Box emulation) with preview image of the channel and display of all relevant quality parameters
0.49840-17	WLAN	Wi-Fi antenna 2,4 GHz, connectivity and tests (in preparation)
<b>Telephony upgrades</b>		
0.49810-25	ISDN	ISDN S0-TE, UK0 (4B3T or 2B1Q) and analogue interface
<b>Extensions for KE Manager</b>		
0.49830-15	Real Time Analysis	Enables Real Time Analysis (Live View) for evaluation of current running DSL service test on PC
<b>Packages</b>		
0.49815-91	KE3550 All-IP package	<b>KE3550 All-IP package contains:</b> 0.49815 KE3550 xDSL Multitester, 1 GbE interface, ADSL 1/2/2+ and VDSL 2 Vectoring Annex A/B, 4 GB Memory, Bluetooth 0.49830-5 VoIP Tests (terminal simulation) with display of all relevant quality parameters
0.49815-93	KE3550 xDSL/LAN-Testing package	<b>KE3550 xDSL/LAN Testing package contains:</b> 0.49815 KE3550 xDSL Multitester, 1 GbE interface, ADSL 1/2/2+ and VDSL 2 Vectoring Annex A/B, 4 GB Memory, Bluetooth 0.49830-5 VoIP Tests (terminal simulation) with display of all relevant quality parameters 0.49420 KE7200 Network Tester with TDR, PoE+/+, IP scan and save function



Icon	Type	Description
0.49604	Bluetooth Earset	 Bluetooth earset with microphone, internal speaker and microphone are disabled!
0.49620-16	Car	 Car charger 12 V 1,5 A
0.57620	Carrying bag, large	 Carrying bag with four device / cable panels, large version
0.57451-02	Tempered Glass Screen Protection	 Extremely tempered glass (hardness 9H), protects against scratches and cracks, for KE3700
0.49620-10	KE905 Remote	 Electronic line switcher. Ousable only in conjunction with KECT option. Control and execution of manual and automatic test sequences directly through the previously listed devices.
0.49620	KE901 Loop test assistant	 Loop test assistant, consisting of KE905 Remote (electr. line switcher) and KE910 controller for manual control of switching

KE3700																					
<b>Compliance</b> ADSL1/2/2+	ATIS/ANSI T1.413 Issue 2 ITU-T G.992.1 (ADSL incl. Annex A, B, J) ITU-T G.992.3 (ADSL2 incl. Annex A, B, J, L) ITU-T G.992.5 (ADSL2+ incl. Annex A, B, J, M) IEEE 802.3ah (PTM) ITU-T G.998.1/2/3 (Bonding)																				
VDSL2	ITU-T G.993.2 / 993.5z VDSL2 (Vectoring) ITU-T G.998.1/2/3 (Bonding with Profile 17a) Profiles: 8a/b/c/d, 12a/b, 17a, 30a and 35b (Annex Q) optional Bandplan: 997, 998, US0 IEEE 802.3ah (PTM)																				
G.fast	ITU-T G.9700 / G.9701																				
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<b>Test interfaces</b>	VDSL2, ADSL 1/2/2+ with auto detection Ethernet 10/100/1000 Ethernet 10/100/1000 management Web browser for service confirmation																				
<b>Encapsulation</b>	RFC 2684 supporting bridged Ethernet (IPoE), IPoA (RFC 1577), PPPoE (RFC 2516), PPPoA/LLC and PPPoA/VC-MUX (RFC 2364)																				
<b>Operating modes</b>	DSL Terminal, Router and Modem mode Ethernet terminal mode																				
<b>Login format</b>	Username and password using PAP / CHAP																				
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<b>Ping test</b>	<p>Ping destination: Gateway, IP-Address or URL</p> <p>Number of Pings: 1 to 9999</p> <p>Packet size: 56 to 2048 Bytes (default is 56)</p> <p>Timeout: 1 to 2000 seconds</p> <p>Results: Packets sent/received, average round-trip delay (ms)</p>																				
<b>Traceroute test</b>	<p>Traceroute destination: Gateway, IP-Address or URL</p> <p>Timeout: in seconds, maximum is 120 s</p> <p>Packetsize: 32 Bytes</p> <p>Number of hops: 1 to 100 (default is 30)</p> <p>Results: Indicates IP address of hop and round trip time in milliseconds (ms)</p>																				
<b>FTP/HTTP-throughput test*</b>	<p>Address: IP or URL</p> <p>Direction: Upload and/or Download up to 700 MBit/s</p> <p>Results: Time, kB transferred, speed in kBit/s</p> <p>Bookmarks: User definable</p> <p>* Run up to 10 tests simultaneously</p>																				
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<b>Interface options</b>	xDSL bonding module KECT copper qualifying up to 31 MHz and Telco Multimeter TDR fault detection / localization ISDN BRI Uk0 / S0 / POTS interface (4B3T oder 2B1Q) Wi-Fi interface																				
<b>Bluetooth</b>	Bluetooth module for headset connection and data transfer, class 2																				
<b>Display</b>	3,5" TFT Display, RGB 240 x 320 sunlight readable																				
<b>Power supply</b>	High performance LiPo battery																				
<b>Dimensions</b>	230 x 110/90 x 70 mm																				
<b>Weight</b>	1300 g																				
<b>Housing</b>	Impact-resistant ABS case with protective and high impact plexiglass as display cover																				
<b>Menu languages</b>	