

PROGRAM 2019

Test and Measurement for
Telecommunication / IT / Electric



MULTITEST series: xDSL broadband testers

■ Introduction.....	3
■ KE3700.....	4
■ Product matrix	7
■ KE3550.....	8
■ Specifications	10

FLEXITEST series: Network testers

■ KE7200.....	11
■ KE7100.....	12
■ Product matrix	13
■ KE7010.....	13
■ Specifications	14
■ POEcheck	14
■ KE7207 and KE7208.....	15
■ KE7107 and KE7108.....	15

FIBRETEST series: Fibre optic test solutions

■ KE8000.....	16
■ KE8100–KE8200.....	16
■ Specifications	16
■ KE850.....	17
■ KE8001–KE8083.....	17

EASYTEST series: Cable and line tracers

■ KE301–KE801.....	18
■ Product matrix/Specifications	19
■ KE2093.....	20
■ Usages	20

COPPERTEST series: Cable fault meters

■ KE2500.....	21
■ KE3700.....	22
■ Specifications	23
■ KE901/905.....	24
■ KE2100.....	24

TELCO TEST series: Cable conductor test sets/Analogue test telephone

■ CCTS-03	25
■ TalkSet	25
■ TP09D	25

Accessories

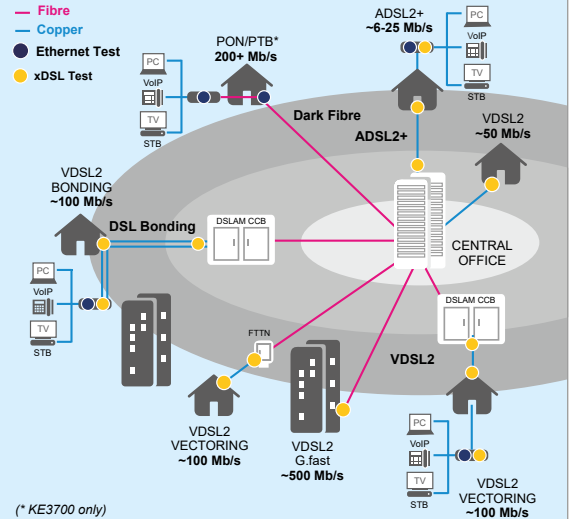
■ Accessories	26
---------------------	----

New Broadband technologies

With the new VDSL2 Bandplan 35, also called Super Vectoring or Vplus, up to 35 MHz in the frequency spectrum can be used for data transmission, which can correspond to a doubling of previous VDSL2 vectoring data rates (17 MHz). An interesting technology for „Fiber to the Building“ (FTTB) bears the name G.fast. In the current version up to 106 MHz, G.fast data rates of up to 1000 Mbps are possible in the downstream.

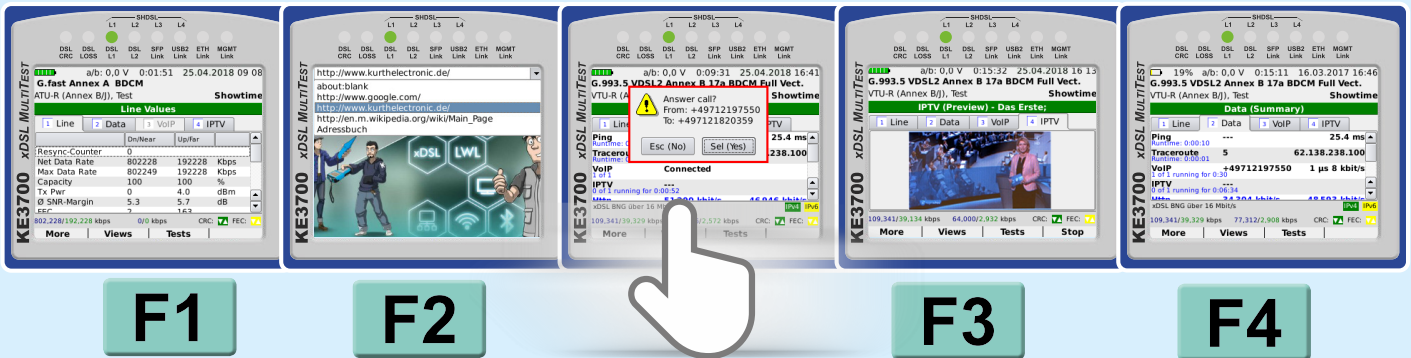
However, the limiting factor of both technologies is the length of the copper twin wire to the building or inside the building. In FTTH installations, the medium copper is completely dispensed with and the „glass fiber“ is laid directly to the user. These networks are the foundation for the highest possible bandwidths.

Our xDSL MultiTest platform supports current and future broadband technologies and offers a future-proof investment through its modular hardware and software concept.



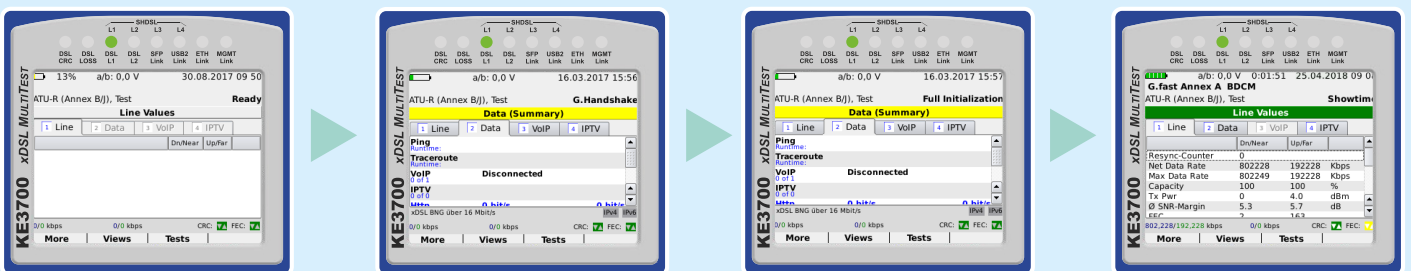
The benefits of the xDSL MULTITEST platform

At-a-glance display and multitasking with KE3700 and KE3550



Waiting times or complicated and time-consuming switching between individual tests and various menu items are a thing of the past thanks to the one-button display. Operation via hotkeys and the keyboard enables fast switching between parallel tests. The Multitester can be operated like a PC, with real multitasking functionality you can jump between windows. Further tests can be added without losing the current synchronization and PPP connection. This guarantees a fast, uncomplicated and comprehensive diagnosis.

The automated KE3700 und KE3550 MULTITEST initial test



It is not necessary to know which service is active. The testers are equipped with automatic detection of the DSL service, from ADSL, VDSL/Vectoring/Super Vectoring to G.fast. The automation of the synchronization as an initial test makes the work much easier – simply connect the test cable and start the test. After successful synchronization, the most important information is displayed immediately thanks to the at-a-glance display. Numerical and graphical information is clearly arranged and well interpretable for the technician.

MULTITEST software included

The bundled KE-Manager software is a flexible tool for managing the MultiTest family, downloading the measurements and creating customer-specific measurement reports. Measurements and measurement profiles can be conveniently edited and created here. With the optional LiveView function, running measurements can be displayed directly from the device on the PC and interpreted there.

NEW

The next generation of „All-in-One“ testers

The **KE3700 xDSL MULTITEST** is the ideal tool for service technicians of network operators and ITC specialists - for testing tasks of current and future broadband technologies.

The new version 2 contains several improvements compared to its predecessor, including more powerful hardware and optimized edge protection.

A versatile and revolutionary multitester for broadband services ADSL1/2/2+/SHDSL/VDSL2, VDSL2 vectoring, for the new technologies Super Vectoring (Vplus) Bandplan 35b Annex Q and G.fast as well as for GPON and Ethernet PtP in FTTH networks.

The modular concept of the KE3700 offers the user the possibility to combine the functions of several test devices, such as xDSL tester, VoIP/ISDN/Analogue test telephone, IPTV tester and cable fault measuring device in one housing. This modular technology ensures a high degree of future and investment security and allows the technician, even after purchasing the KE3700, to individually adapt the device to the requirements of the market.

Thanks to the intuitive operation and the ability to perform several tests in parallel, fault diagnosis in the network is carried out as quickly as possible. Service malfunctions caused by faults in the external cabling, the internal cabling or, for example, defective customer equipment, can be reliably pinpointed.

The xDSL autodetect function enables automatic synchronisation, the at-a-glance display guarantees a clear display of the test-relevant line and service parameters without laborious scrolling or time-consuming menu changes. The large colour display of the KE3700 is protected by safety glass and can even be read in sunlight.

Measured values are displayed clearly and can be stored for documentation and managed with the supplied KE-Manager software. The transfer of the measurement results is also possible through the QR code display. Stored measurements can be retrieved and viewed in detail directly in the KE3700 for verification.

Equipped with the copper test module, automatic measuring sequences can be created in the KE3700, which considerably simplifies the measuring processes of the technicians in the field. In combination with the KE905 Remote, the necessary switches at the remote end are carried out automatically, there is no need for an additional person and the measuring insert is noticeably shortened.



Image shows KE3700 with Wi-Fi and SFP options



AT A GLANCE

- ADSL-ADSL2+, VDSL2, VDSL2 (Vectoring/Super Vectoring), xDSL-Bonding and G.fast with Auto Services Detection
- SHDSL support, 2 to 8 wires
- SFP port for Digital Diagnostic Mode, optical level/power meter, triple play tests, GPON-ONT
- Maximum Throughput Rates for Performance Measurements in Gigabit Networks
- VoIP tests incl. SIP trunk and MultiCalling with extensive statistics
- IPTV tests with IPTV scan and preview image as well as statistics
- Wi-Fi connectivity and triple play tests (data, VoIP, IPTV) with web browser
- ISDN $U_{K0}/S_0/S_{2M}$ and Analogue Test Handset Function
- Copper test (KECT), DC measurements, resistance fault localization (RFL), TDR measurements, remote control KE905 line change-over switch
- High frequency measurements for line qualification up to 31 MHz

xDSL

- ADSL-ADSL2+ Annex B/J
- VDSL2 incl. VDSL2 Vectoring, Super Vectoring (Vplus) Profile 8a/b/c/d, 12a/b, 17a, 30a, 35b

DSL Highspeed

- Super Vectoring (Vplus), ITU-T G.993.2 Annex Q up to 35 MHz
- G.fast ITU-T G.9700/G.9701 up to 106 MHz
- ADSL2+ and VDSL2 Bonding (ITU-T G.998.1/2/3)

SHDSL 2- to 8-wire

- Ethernet First Mile (EFM), TDM and ATM support
- Modem (STU-R) and DSLAM emulation (STU-C)

VoIP tests

- VoIP connections over xDSL and Ethernet
- SIP Trunk and QOS support
- Multi Calling- up to 10 VoIP calls simultaneously
- Extensive VoIP statistics

IPTV tests

- IPTV connections over xDSL and Ethernet
- Extensive IPTV statistics
- Preview function and multistreaming
- IPTV scan

Wi-Fi tests

- 2.4/5 GHz incl. SMA antenna
- WPA/WPA2, WEP, WPS
- Wi-Fi scan (SSID), transmission channel, signal strength
- Triple Play tests (Data/VoIP/IPTV) directly via the device

Gigabit ethernet ports

- Copper RJ45
- SFP (optical fibre) power meter, Digital Diagnostic Mode
- GPON ONT modem emulation

ISDN/Analogue test telephone

- ISDN S_0/U_{K0} /analogue
- S_{2M} for PMX connections
- Extensive measurement options
- BER test (Bit error rate test)
- D-channel monitoring

Coppertest with KECT





















- Telco multimeter measurements for troubleshooting: Current, voltage, insulation, resistance and capacitance, symmetry
- Prequalification of the twisted pair up to 31 MHz: Impedance measurement, reflection and unbalance loss, LLC, NEXT measurement, receive level and spectrum, broadband noise and pulse noise
- Line analysis and automated measuring process
- Remote: KE905 Remote unit for (remote) switching directly via control commands
- TDR measurements for precise cable fault localization up to 6 km
- RFL measurement: Resistance error localization via 2- and 3-wire method



Image shows KE3700 with optical fibre module

Image shows KE3700 with KECT module

Icon	Type	Description
Packages		
TIP 0.49840-90	KE3700 All-IP / Wi-Fi package	KE3700 All-IP/Wi-Fi package contains: 0.49840 KE3700 Base unit ADSL-ADSL2+ Annex B/J; 0.49830-20 VDSL2 Vectoring/Super Vectoring , profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b; 0.49830-5 VoIP tests / 0.49830-5-10 VoIP MultiCalling ; 0.49830-3 SFP port for measurements in fibre optic networks; 0.49840-17 Wi-Fi Connect , 2.4 / 5 GHz incl. SMA antenna; 0.49840-17-10 Wi-Fi tests , terminal mode
0.49840-91	KE3700 All-IP package	KE3700 All-IP package contains: 0.49840 KE3700 Base unit ADSL-ADSL2+ Annex B/J; 0.49830-20 VDSL2 Vectoring/Super Vectoring , profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b; 0.49830-5 VoIP tests / 0.49830-5-10 VoIP MultiCalling ; 0.49830-3 SFP port for measurements in fibre optic networks
0.49840-92	KE3700 Complete package	KE3700 xDSL Complete package contains: 0.49840 KE3700 Base unit ADSL-ADSL2+ Annex B/J; 0.49830-20 VDSL2 Vectoring/Super Vectoring , profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b; 0.49830-5 VoIP tests / 0.49830-5-10 VoIP MultiCalling ; 0.49830-3 SFP port for measurements in fibre optic networks; 0.49830-25-4B3T ISDN U_{ko}/S₀/analogue telephony option
0.49840-93	KE3700 xDSL / LAN tester package	KE3700 xDSL/LAN tester package contains: 0.49840 KE3700 Base unit ADSL-ADSL2+ Annex B/J; 0.49830-20 VDSL2 Vectoring/Super Vectoring , profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b; 0.49830-5 VoIP tests / 0.49830-5-10 VoIP MultiCalling ; 0.49830-3 SFP port for measurements in fibre optic networks; 0.49420 KE7200 Ethernet FlexiTest Network tester with 2 remote units KE7010, PC software, test cable set and protective bag
0.49840-94	KE3700 xDSL / VoIP / coppers test package	KE3700 xDSL / VoIP / coppers test package contains: 0.49840 KE3700 Base unit ADSL-ADSL2+ Annex B/J; 0.49830-20 VDSL2 Vectoring/Super Vectoring , profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b; 0.49830-5 VoIP tests / 0.49830-5-10 VoIP MultiCalling ; 0.49830-13 KECT copper test module (cable multimeter); 0.49830-13-10 RF measurements for line qualification up to 31 MHz
xDSL Test device		
0.49840	KE3700	xDSL Multitester, 1 GbE Interface, ADSL 1/2/2+, Annex B/J, 8 GB storage, Bluetooth
xDSL / High speed options		
0.49830-20	VDSL2 Vectoring	Upgrade VDSL2 Vectoring, Super Vectoring (Vplus) profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b
0.49830-30	G.fast	G.fast 106 MHz (ITU-T G.9700/G.9701)
0.49830-40	Bonding	xDSL Bonding (ADSL/2/2+, VDSL2 profile 17a, 30a)
Symmetrical DSL		
0.49830-26	SHDSL	SHDSL 2–8-wire interface
Digital multimeter		
0.49840-12	DMM	Digital multimeter: Voltage, resistance, capacitance, length
Coppers test upgrades		
0.49830-13	KECT	Telco multimeter with high interference resistance, control functions for measuring aids such as KE905
0.49830-13-10	HF / LQ	High frequency (HF) measurements for qualification of copper lines up to 31 MHz (0.49830-13 KECT required)
0.49830-11	TDR	TDR up to 6 km line length at Ø 0.5 mm (0.49830-13 KECT required)
0.49830-13-20	RFL	Resistance error localization according to Murray and Küpfmüller, multisection support (0.49830-13 KECT required)
IP service tests		
0.49830-5	VoIP	VoIP test (terminal simulation) with display of the quality parameters required for evaluation xDSL / Ethernet
0.49830-5-10	VoIP MultiCalling	VoIP MultiCalling: Up to 10 parallel VoIP calls incl. statistics for xDSL / Ethernet (0.49830-5 VoIP required)
0.49830-6	IPTV	IPTV test (Set Top Box emulation) with display of the quality parameters required for evaluation xDSL / Ethernet
0.49830-6-10	IPTV Scan	IPTV channel scan with display of the switching time (0.49830-6 IPTV required)
0.49840-17	Wi-Fi Connect	Connectivity 2.4/5 GHz incl. SMA antenna, Wi-Fi scan (SSID), transmission channel, WPA,WPA2, WEP, WPS, Management
0.49840-17-10	Wi-Fi Test	Wi-Fi terminal device mode 2.4/5 GHz, performance tests, Triple Play tests (option dependent, 0.49840-17 Wi-Fi required)
Telephony options		
0.49830-25	ISDN	ISDN S ₀ -TE, U _{ko} (4B3T o. 2B1Q) and analogue interface with additional SFP-Port (must be activated with 0.49830-3-Soft)
0.49830-27	S2M	S _{2M} Primary multiplex interface (only in conjunction with SHDSL option)
Fibre / Copper module options		
0.49830-3	SFP-Port	SFP port for SFP copper or SFP fibre transceiver, Digital Diagnostic Mode, optical level / power meter, performance tests, Triple Play tests (option dependent)
0.49830-4	GPON	GPON ONT, Modem emulation incl. GPON software and SFP ONT module (requires SFP port option 0.49830-3-Soft/0.49830-3)
0.49830-3-Soft	SFP activation	Activation of the existing SFP port of the 0.49830-25 ISDN option (0.49830-3 SFP port option is not required)
KE Manager option		
0.49830-15	Real time analysis	Detailed viewing of a running measurement on a PC and evaluation of long-term measurements

		KE3700 MULTITEST	KE3550 MULTITEST
■ standard □ optionally available – not available			
	ADSL-ADSL+, Annex B/J	■	■
	VDSL2 Vectoring/ Super Vectoring (Vplus)	□	■
	G.fast 106 MHz	□	□
	xDSL Bonding (ADSL/2/2+, VDSL2 Profile 17a, 30a)	□	□
	SHDSL (2- to 8-wire interface)	□	-
	S _{2M} primary multiplex interface	□	-
	Maximum transfer rates for performance measurements in gigabit networks	■	-
	VoIP (SIP Trunk, QoS, VoIP telephony, MultiCalling)	□	□
	IPTV (multistream or preview image, scan)	□	□
	Wi-Fi interface 2.4/5 GHz: Connectivity and tests	□	□
	ISDN S ₀ -TE / Analogue (Telephony, BERT, services, ...) test telephone function	□	□
	Analogue telephony with test telephone function	□	□
	Copper tests (Telco multimeter) with high interference immunity for cable fault measurements	□	□
	High frequency measurements (HF) for the qualification of copper lines up to 31 MHz	□	□
	TDR measurements (cable fault and length measurement up to 6 km)	□	□
	RFL resistance fault localisation	□	□
	SFP port Gigabit-Ethernet (Optical fibre or copper)	□	-
	GPON-SFP port (ONT emulation)	□	-
	Touch screen direct input, colour screen, sunlight readable (in preparation)	■ KE3700 Touch only	-
	Bluetooth for headset connection and data transfer	■	■
	Rubber keyboard für for fast operation with hotkeys	■	■
	Future-proof thanks to modular technology	■	■
	Robust, water-repellent casing with fall protection	■	■
	High-performance LiPo battery for prolonged use in the field	■	■
	Sunlight-readable TFT colour display	■	■
	Including software for administration, creation of protocols and test sequences	■	■

Multifunctional tester at an entry-level price

The **KE3550 xDSL MULTITEST** offers high performance and a wide range of functions at an affordable price. The new version 2 contains several improvements compared to its predecessor, including more powerful hardware and optimized edge protection.

The KE3550, specially designed for use in copper-bound broadband networks, offers ICT specialists and service technicians the interfaces for DSL and Ethernet even in its basic configuration and supports ADSL-ADSL2+ Annex B/J, VDSL2 and VDSL2 Vectoring/Super Vectoring (Vplus) with automatic detection of the xDSL service. Compatibility with the DSL high-speed module for Super Vectoring and G.fast makes the KE3550 an expandable and future-proof investment. The revolutionary one-touch display and the ability to perform multiple tests simultaneously make complicated and time-consuming measurement procedures a thing of the past.

The KE3550's modular platform supports additional functions such as ISDN and analogue test phone, Triple Play tests for IPTV and VoIP suitability as well as the possibility to perform extensive copper tests up to 31 MHz. The integrated high-performance battery ensures a long service life in the field.



Image shows KE3550 with VoIP option

Functions KE3550

xDSL

- ADSL-ADSL2+ Annex B/J
- VDSL2 incl. VDSL2 Vectoring, Super Vectoring (Vplus) Profile 8a/b/c/d, 12a/b, 17a, 30a, 35b

DSL Highspeed

- Supports Super Vectoring (Vplus), ITU-T G 993.2 Annex Q up to 35 MHz
- Supports G.fast ITU-T G 9700/9701 up to 106 MHz
- ADSL2+ and VDSL2 Bonding (ITU-T G.998.1/2/3)

VoIP tests

- VoIP connections via xDSL and Ethernet
- VoIP, incl. Quality of Service (QoS)
- SIP-Trunk support
- Multi Calling - up to 10 VoIP calls simultaneously
- Extensive VoIP statistics

IPTV tests

- IPTV connections via xDSL and Ethernet
- Extensive IPTV statistics
- Preview function and multistreaming

Wi-Fi tests

- 2.4/5 GHz incl. SMA antenna
- WPA/WPA2, WEP, WPS
- Wi-Fi scan (SSID), transmission channel, signal strength
- Triple-Play tests (Data/VoIP/IPTV) directly via the device

Gigabit Ethernet port

- Copper RJ45

ISDN/Analogue test telephone

- ISDN S_0/U_{ko} /analogue
- S_{2M} for PMX connections
- Extensive measurement functions
- BER test (Bit error rate test)
- D-channel monitoring

Coppertest with KECT

- Telco Multimeter measurements for fault location: Voltage, insulation, resistance and capacitance, symmetry
- Prequalification of the twisted pair up to 31 MHz: Impedance measurement, reflection and unbalance loss, LLC, NEXT measurement, receive level and spectrum, broadband noise and pulse noise
- Line analysis and automated measuring process
- Remote: KE905 Remote unit for (remote) switching directly via control commands
- TDR measurements for precise cable fault location up to 6 km
- RFL measurement: Resistance error localization via 2- and 3-wire method

AT A GLANCE

- ADSL-ADSL2+, VDSL2, VDSL2 (Vectoring/Super Vectoring), xDSL-Bonding and G.fast with Auto Services Detection
- High throughput rates for performance measurements up to 800 MBit/s
- VoIP tests incl. SIP trunk and MultiCalling with extensive statistics
- IPTV tests with IPTV scan and preview image as well as statistics
- Wi-Fi connectivity, triple play tests (data, VoIP, IPTV)
- ISDN U_{k0}/S_0 and analogue test handset function
- Copper test (KECT), DC measurements, RF measurements up to 31 MHz, TDR measurements, RFL, remote controllable line change-over switch KE905

Icon	Type	Description
Packages		
TIP 0.49815-90	KE3550 All-IP/Wi-Fi package	KE3550 All-IP/Wi-Fi package contains: 0.49815 KE3550 Base unit ADSL-ADSL2+ Annex B/J; VDSL2 Vectoring / Super Vectoring , profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b; 0.49830-5 VoIP tests / 0.49830-5-10 VoIP MultiCalling 0.49840-17 Wi-Fi Connect , 2.4/5 GHz incl. SMA antenna 0.49840-17-10 Wi-Fi tests , terminal mode
0.49815-91	KE3550 All-IP package	KE3550 All-IP package contains: 0.49815 KE3550 Base unit ADSL-ADSL2+ Annex B/J; VDSL2 Vectoring / Super Vectoring , profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b; 0.49830-5 VoIP tests / 0.49830-5-10 VoIP MultiCalling
0.49815-93	KE3550 xDSL/LAN tester package	KE3550 xDSL/LAN tester package contains: 0.49815 KE3550 Base unit ADSL-ADSL2+ Annex B/J; VDSL2 Vectoring / Super Vectoring , profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b; 0.49830-5 VoIP tests / 0.49830-5-10 VoIP MultiCalling 0.49420 KE7200 Ethernet FlexiTest Network tester with 2 remote units KE7010, PC software, test cable set and protective bag
xDSL Test device		
0.49815	KE3550	xDSL Multitester, 1 GbE Interface, ADSL 1/2/2+ Annex B/J and VDSL 2 Vectoring/Super Vectoring (profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b)
xDSL/High speed options		
0.49830-30	G.fast	G.fast 106 MHz (ITU-T G.9700/G.9701)
0.49830-40	Bonding	xDSL Bonding (ADSL/2/2+, VDSL2 profile 17a, 30a)
Digital multimeter		
0.49840-12	DMM	Digital multimeter: Voltage, resistance, capacitance, length
Copeptest upgrades		
0.49830-13	KECT	Telco multimeter with high interference resistance, Control functions for measuring aids such as KE905
0.49830-13-10	HF/LQ	High frequency (HF) measurements for qualification of copper lines up to 31 MHz (0.49830-13 KECT required)
0.49830-11	TDR	TDR up to 6 km line length at \varnothing 0.5 mm (0.49830-13 KECT required)
0.49830-13-20	RFL	Resistance error localization according to Murray and K�pfm�ller, multisection support (0.49830-13 KECT required)
IP service tests		
0.49830-5	VoIP	VoIP test (terminal simulation) with display of the quality parameters required for evaluation xDSL/Ethernet
0.49830-5-10	VoIP MultiCalling	VoIP MultiCalling: Up to 10 parallel VoIP calls incl. statistics for xDSL/Ethernet (0.49830-5 VoIP required)
0.49830-6	IPTV	IPTV test (Set Top Box emulation) with display of the quality parameters required for evaluation xDSL/Ethernet
0.49830-6-10	IPTV Scan	IPTV channel scan with display of the switching time (0.49830-6 IPTV required)
0.49840-17	Wi-Fi Connect	Connectivity 2.4/5 GHz incl. SMA antenna, Wi-Fi scan (SSID), transmission channel, WPA, WPA2, WEP, WPS, Management
0.49840-17-10	Wi-Fi Test	Wi-Fi terminal device mode 2.4/5 GHz, performance tests, Triple Play tests (option dependent, 0.49840-17 Wi-Fi required)
Telephony upgrade		
0.49830-25	ISDN	ISDN S_0 -TE, U_{k0} (4B3T o. 2B1Q) and analogue interface with additional SFP-Port (must be activated with 0.49830-3-Soft)
KE Manager option		
0.49830-15	Real time analysis	Detailed viewing of a running measurement on a PC and evaluation of long-term measurements

	KE3700	KE3550
<p>Conformance ADSL1/2/2+</p> <p>VDSL2</p> <p>G.fast</p>	<p>ITU-T G.992.5 (ADSL2+ incl. Annex A, B, J, M), ITU-T G.992.3 (ADSL2 incl. Annex A, B, J, L), ITU-T G.992.1 (G.DMT incl. Annex A, B, J) ATIS/ANSI T1.413 Issue 2 IEEE 802.3ah (PTM) ITU-T G.998.1/2 (Bonding)</p> <p>ITU-T G.993.2 Annex A, B (Vectoring) ITU-T G.998.1/2 (Bonding with Profile 17a) Profiles: 8a/b/c/d, 12a/b, 17a, 30a and 35b (Annex Q) Band Plan: 997, 998, US0 IEEE 802.3ah (PTM)</p> <p>ITU-T G.9700/ G.9701</p>	
DSL parameters	<p>Maximum achievable bit rates Actual achieved bit rates Actual achieved bit rates on bundled lines Latency mode: Fast, Interleaved Data mode: ATM, PTM Capacitance (%) Signal-to-noise ratio (SNR) Output level Attenuation Bits/bin</p>	<p>Attenuation/Bin (Hlog/bin), QLN/Bin, SNR/Bin Provider code, revision Interleave depth Interleave delay Bit Swapping INP, G.INP Vectoring Operation modes: PTM, ATM LOSS, FEC, CRC, HEC, LOF, LOM, SES, UAS, ES LATN per Band, SATN per Band</p>
Test interfaces	<p>ADSL 1/2/2+/VDSL2/VDSL2-Vectoring/Super Vectoring/G.fast w/ auto detect. Ethernet 10/100/1000 management port</p>	<p>Ethernet 10/100/1000 Web browser for service confirmation</p>
Encapsulation	RFC 2684 with support for Bridged Ethernet (IPoE), IPoA (RFC 1577), PPPoE (RFC 2516), PPPoA/LLC and PPPoA/VC-MUX (RFC 2364)	
Operation modes	<p>DSL terminal, router and modem mode Transit mode with modem substitution (DSL/Ethernet) Ethernet terminal mode</p>	
Login format	Username and password with PAP/CHAP	
Connection options	<p>VoIP autoconfiguration at BNG DHCP 60 autoconfiguration LAN/WAN state DNS, Gateway DHCP Client/Server, DHCP provider class</p>	<p>NAT VLAN ID, VLAN tag VPI/VCI IPv4 and IPv6 Signal strength</p>
Ping test	<p>Ping destination address: Gateway, IP address or URL Number of pings: 1 to 9999, unlimited Packet size: 56 to 2048 Bytes (default value 56) Timeout / Interval: 0 to 2000 seconds Results: Packets sent/recieved, average round-trip delay in ms</p>	
Traceroute test	<p>Traceroute target: Gateway, IP address or URL Timeout: in seconds, default value 1 s, up to 120 s Number of hops: 1 to 100 (default value 30) Results: Specification of the IP address of the hop and round-trip delay in ms</p>	
FTP/HTTP data rate test*	<p>Address: IP or URL Direction: Upload and /or download up to 800 MBit/s Results: Time, transmitted kB, rate in kBit/s Bookmarks: User-definable</p>	* Perform up to 10 tests simultaneously
Software options	<p>VoIP test: Single, Multicall, QoS, SIP trunk, DSL and Ethernet Codecs: iLBC, G.711 A-law, G.711 μ-law, G.722, GSM, L16, Speex Results: MOS, R factor, Latency jitter, Packets (loss, sent)</p>	<p>IPTV test: Video standards: MPEG2, MPEG4 part 2 and 10, DSL and Ethernet Programmable channel list, analyses up to zu 10 streams simultaneously Results: MOS, R factor, Latency jitter, Packets, Preview image</p>
Interface options	<p>xDSL Bonding module SHDSL 2- to 8-wire interface KECT Copper qualification up to 31 MHz with telco multimeter TDR error detection /location SFP port for copper, fibre (second GbE port) or GPON (ONT), Slide-in modules optionally available ISDN U_{K0} / S₀ / Analogue interface S_{2M}, primary multiplex interface Wi-Fi interface 2.4 / 5 GHz, 802.11b,g,n</p>	<p>xDSL Bonding module KECT Copper qualification up to 31 MHz with telco multimeter TDR error detection /location ISDN U_{K0} / S₀ / Analogue interface Wi-Fi interface 2.4 / 5 GHz, 802.11b,g,n</p>
Bluetooth	Bluetooth modul for headset connection and data transfer, Class 2	
Display	3,5" TFT display, RGB 240 x 320, sunlight-readable	
Power supply	Extra powerful LiPo battery	
Dimension	230 x 110 / 90 x 70 mm	
Weight	1100 g	
Housing	Impact resistant ABS with fall protection and highly impact resistant plexiglass display cover	
Menu languages		

The **KE7200 Ethernet Performance Tester** with memory function is the ideal tool for commissioning tests, troubleshooting and documentation in data and telecommunication networks - with an outstanding price/performance ratio. Versatile functions, the large graphic display and intuitive operation enable the user to work efficiently. Long battery life and the robust housing are the perfect conditions for daily use.

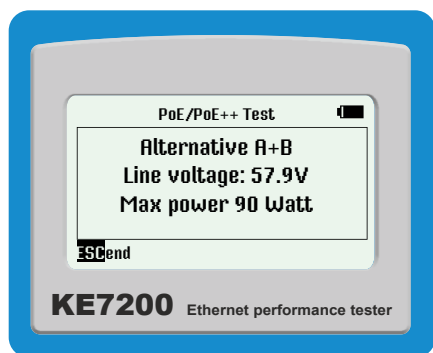
The KE7200 checks the cores and wire pairs of the cable sections for continuity, interruption, short circuit, interchanging and overdraft (split pair) and simultaneously determines the cable length and distance to the fault in the event of short circuit and interruption. With the user-configurable cable database, unknown cable and wiring diagrams are a thing of the past. Up to 32 individual remote units can be managed simultaneously by the KE7200.

The device checks connections for the availability of Power over Ethernet (PoE, PoE+ and PoE++) and determines the available power via load test.

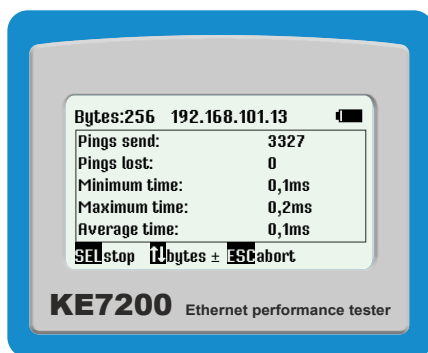
Active network tests, such as detection of the speed up to 1 Gigabit, listing of the existing network participants with name, IP and MAC address and the configurable ping stress test with detailed statistics, provide information about the network and any faulty components.

To assign active data ports, the link LED on the switch is activated with the help of the port finder function and the integrated tone transmission mode enables cable search with unconnected connections using the optional PROBE310.

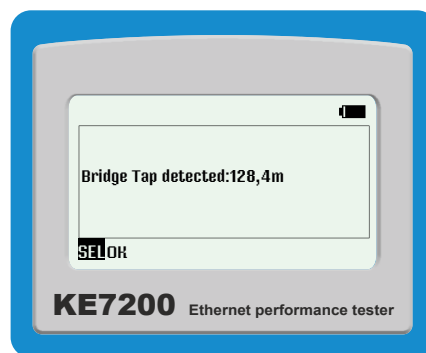
The optional software for the detection of branches in in-house cabling is ideal for tests in the telecommunications network.



PoE to PoE++ test with evaluation/display



Ping stress test to detect defective network components



Detection of Bridge Taps

AT A GLANCE

- Detection and localization of cable faults from 1 wire pair upwards
- Storage and logging
- Integrated, configurable cable database from 1 pair upwards telephone
- Detection of branches in the TC network (bridge taps) – optional
- TDR cable length measurement up to 200 m
- Power over Ethernet load test up to 90 Watts, PoE/+ (IEEE802.3af/at/bt)
- Detection of 10/100/1000 MBit connections
- Network scan/ping stress test
- Portfinder function and tone transmission mode
- Overvoltage protection up to 100 V

■ ■ ■	Type	Description
0.49420	KE7200	Active network tester with 2 remote units KE7010, PC software, test cable set and protective bag
0.49421	KE7200 PRO Kit	Active network tester with 4 remote units KE7010, search signal receiver Probe310 (blue), PC software, test cable set and protective bag
0.49420-100	Bridge Tap	Software option for the KE7200 for the detection of Bridge Taps in the building's internal telecommunications cabling. Determines the presence and distance to the branch.



The cable measurements and active network information stored on the KE7200 can be managed and edited with this free software. The bundled Windows PC software **Ethernet Manager** provides detailed information on cable lengths, cable faults and active network participants and allows the creation of customer-specific measurement protocols.

Testreport

Übergabeprotokoll der Kabelmessungen
Kabeltyp: DraKa UC500 AS23 Cat.6A
Kabel geeignet für 10Base-T / 100Base-T / 1000Base-T

Kunde: Hans Müller GmbH
Adresse: Lange Straße 9
78945 Musterstadt

1_ID: 2	Datum: 02.01.2013	Messname: OBJEKT MUELLER_0000	0 Fehler gefunden	list	soll
Techniker: Andreas Heller		Kabel Type: DRAKA UC500 C6A			
Bemerkung: Hauptgebäude EG		Gepr. nach: 568A STP			
Arbeitsplatz Herr Weber 1/1		Länge: 32,4 m			
Ergebnis: OK					

2_ID: 2	Datum: 02.01.2013	Messname: OBJEKT MUELLER_0001	1 Fehler gefunden	list	soll
Techniker: Andreas Heller		Kabel Type: DRAKA UC500 C6A	Keine Verbindung	Pin=>Pin	auf Pin
Bemerkung: Hauptgebäude EG		Gepr. nach: 568A STP			
Arbeitsplatz Herr Milz 1/2		Länge: 32,4 m			
Ergebnis: NICHT OK					

3_ID: 2	Datum: 02.01.2013	Messname: OBJEKT MUELLER_0002	2 Fehler gefunden	list	soll
Techniker: Andreas Heller		Kabel Type: DRAKA UC500 C6A	Falsche Verbindung	Pin=>Pin	auf Pin
Bemerkung: Hauptgebäude EG		Gepr. nach: 568A STP	4 - 1 ==> 4		
Kfm. Abt. 1 1/3		Länge: 32,3 m	1 - 4 ==> 1		
Ergebnis: NICHT OK					

4_ID: 2	Datum: 02.01.2013	Messname: OBJEKT MUELLER_0003	4 Fehler gefunden	list	soll
		Kabel Type: DRAKA UC500 C6A		Pin=>Pin	auf Pin

KE7200 Manager - test-bin.exe

Load data (PC) Save all Data Save viewed Data Remove sel. Row Print Data Config. sheet / IP Update KE7200 Manual

Cable test | Network Serial number: 000208 Firmware version: 01.47 Hardware version: 05.201

Show following measurements: all copy operator/date from row before copy act. operator/date into all visible rows

Nr.	Name der Messung	Verdrahtung	Fehler 1	Fehler 2	ID/ Raum	Datum	Speichername
1	OBJEKT MUELLER	568A STP	No error	No error	2	09.02.2016	OBJEKT MUELLER_0000
2	OBJEKT MUELLER	568A STP	Open	No error	2		OBJEKT MUELLER_0001
3	OBJEKT MUELLER	568A STP	Wrong connection	Wrong connection	2		OBJEKT MUELLER_0002
4	OBJEKT MUELLER	568A STP	Wrong connection	Wrong connection	2		OBJEKT MUELLER_0003
5	OBJEKT MUELLER	568A STP	No error	No error	2		OBJEKT MUELLER_0004
6	OBJEKT MUELLER	568A STP	Open	No error	2		OBJEKT MUELLER_0005
7	OBJEKT MUELLER	568A STP	Open	Open	2		OBJEKT MUELLER_0006
8	OBJEKT MUELLER	568A STP	Open	Open	2		OBJEKT MUELLER_0007
9	OBJEKT MUELLER	568A STP	No error	No error	2		OBJEKT MUELLER_0009
10	OBJEKT MUELLER	568A STP	Open	Open	2		OBJEKT MUELLER_0010
11	OBJEKT MUELLER	568A STP	Short	No error	2		OBJEKT MUELLER_0011
12	OBJEKT MUELLER	568A STP	No error	No error	2		OBJEKT MUELLER_0012
13	OBJEKT MUELLER	568A STP	No error	No error	2		OBJEKT MUELLER_0013

Name: OBJEKT MUELLER

Customer: _____

Address: _____

Comment: _____

Operator: _____

Cable type: DRAKA UC500 C6A

Type of test: 568A STP

Length: 32,4 m / 106,4 ft

Sum Cable Length of all visible tests: 627,6 m / 2059,0 ft

Date: _____

ID Remote unit: 2

Remote connector

KE7200 connector

4 Error(s) found	Pin(s)	proper
Wrong connection	4 - 1	==> 4
Wrong connection	5 - 2	==> 5
Wrong connection	1 - 4	==> 1
Wrong connection	2 - 5	==> 2

Sprache/Language: english Exit

KE7100

Ethernet FLEXiTEST series

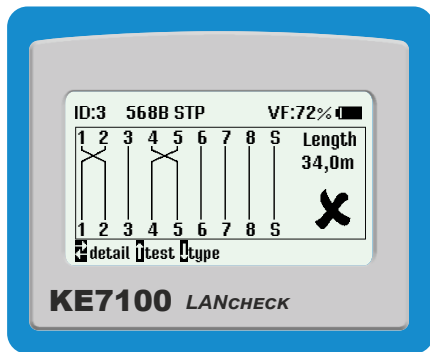
The **KE7100 LANCHECK** is an easy-to-use, handy and cost-effective LAN tester. The little brother of the KE7200 Ethernet Performance Tester is perfect for measurements in ITC networks where no documentation is required or necessary.

The KE7100 checks the wires and wire pairs of the cable sections for continuity, interruption, short circuit, interchanging and overdrift (split pair) and simultaneously determines the cable length and distance to the fault in the event of short circuit and interruption. With the user-configurable cable database, unknown cable and wiring diagrams are a thing of the past. Up to 32 individual remote units can be managed simultaneously.

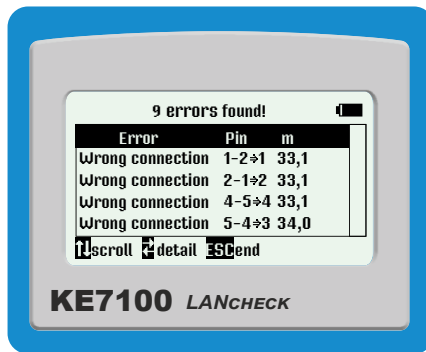
The device checks connections for the availability of Power over Ethernet (PoE, PoE+ and PoE++) and determines the available power.

To assign active data ports using the port finder function, the link LED on the switch is activated and the integrated tone transmission mode enables cable search with unconnected connections using the optional PROBE310.

The KE710x sets are ideal for installation and troubleshooting in telephone and data networks.



Clear indication of wiring errors



List of errors with distance

AT A GLANCE

- Detection and localization of cable faults from 1 wire pair upwards
- TDR cable length measurement up to 200 m
- Configurable cable database from 1 pair upwards telephone
- Power over Ethernet load test (IEEE802.3af/at/bt)
- Portfinder function and tone transmission mode
- Overvoltage protection up to 100 V



Type	Description
0.49410 KE7100	LAN Tester with 1 remote unit KE7010, test cable set and protective bag

		KE7200	KE7100
■ standard □ optionally available – not available			
	Easy to read display with clear visualization of cable status	■	■
	Checks cabling for interruption, continuity, short circuit, interchanging, shielding	■	■
	Detection of split pair errors (overdraft)	■	■
	Testing of the wiring with pin and wire assignment (Wiremap) from a pair of wires	■	■
	Measurement of the wire length and distance to the fault up to 200 meters (TDR function)	■	■
	16 preset wiring profiles and cable types, own profiles can be created in the device	■	■
	PoE/PoE+/PoE++ availability and load tests according to IEEE802.3af/at/bt	■	■
	Active network identification, link-blink function and transmission of search tones (with optional Probe)	■	■
	Active network test with static IP or DHCP and 10/100/1000 MBit/s detection	■	–
	Network scan with list of active participants with name, IP and Mac address	■	–
	Continuous ping of individual addresses with indication of packet losses / response times for stress test	■	–
	Stores cable tests and network information and allows individual measurement protocols	■	–
	Up to 32 active remote units configurable / number of bundled units	■ / 2	■ / 1
	Optional: Bridge Tap detection for 2-wire lines (4–5)	□	–
	Overvoltage protection up to 100 V	■	■
	Impact-resistant, sturdy casing	■	■

KE7010 Remote




KE7010 remote unit for KE7100 and KE7200.

AT A GLANCE

- Info LED for OK / not OK
- Remote number freely programmable
- Up to 32 remotes can be used for KE7100/KE7200



■■■	Type	Description
0.49415	KE7010	Remote unit, remote number freely programmable

 KE7200/KE7100	
Wiring test Copper	Check of data line assignment with pin and pair assignment - Wiremap Detection of split pair (overdraft) from 2 m 16 connection versions preset - easy creation of own definitions starting from 2 cores 16 cable types preset with VF, creation of own cable types possible Clear graphical display for fast error identification Measurement of individual wire lengths with TDR and display in m or ft. from 2 m to 200 m
Power over Ethernet test	Activation of PoE/PoE+/PoE++ functions Measurement of voltage in V and calculation of available power in watts according to IEEE802.3af/at/bt
Port identification	Link-blink function with NLP Search tone for cable search with capacitive Probe (optional PROBE310) 4 search frequencies selectable
IP network test <i>KE7200 only</i>	Connection via DHCP or static IP Detection of network speed 10/100/1000 Mbit Own IP and MAC address configurable List of active participants with name, IP and MAC address Ping test to selected addresses, ping frame adjustable from 32–1024 bytes Display of ping results for receive/lost and times min/max/average Constant ping mode to generate traffic
Bridge Tap <i>KE7200 only (optional)</i>	Accurate localization of branch lines and branches with TDR function
Overvoltage protection	Up to 100 Volt
Housing	Stable, impact-resistant, weatherproof ABS housing
Batteries	4x 1.5 V alkaline (AA), > 40 h service life
Dimensions	195 x 100/78 x 45 mm
Weight	380 g without batteries
Menu languages	
Operation environment	Working temperature 0 – +50 °C Storage temperature -25 – +75 °C Humidity 90% non-condensing
 KE7010 Remote Unit	
Features	ID programmable 01–32 LED for good/bad indication Can be used with any KE network tester (except KE6000)
Housing	Stable, impact-resistant, weatherproof ABS housing
Dimensions	61 x 41 x 26 mm
Weight	30 g

Power over Ethernet-Tester

POEcheck

The POEcheck is a small test device that can be used to quickly and easily determine whether the Power over Ethernet port is powered and, if so, according to which system (type A or type B) of the IEEE 802.3af standard. Simply plug the patch cable leading to the device into the POEcheck or connect the POEcheck with the supplied test cable to the data socket and the result is immediately displayed.



AT A GLANCE

- Testing for PoE according to IEEE802.3af
- Quick display of the supply variant

■ ■ ■	Type	Description
0.49460	POEcheck	Power over Ethernet Tester with test cable and RJ45 socket



Professional sets for installation and troubleshooting, with the possibility of creating individual measurement reports. The perfect solution for efficient working in active and passive ITC networks.

KE7207

KE7207 consists of the active network tester **KE7200** with memory function and the cable finder kit **KE701 Telco** in an impact-resistant plastic case including test cables, PC software and batteries. The KE701 Telco enables the user to find additional cables and wire pairs in the shortest time without contact and allows the use on telephone, network and voltage-free electrical installations.

KE7208

KE7208 consists of the active network tester **KE7200** with memory function and the cable finder kit **KE801 Fibre & Copper**, which allows the user to use the fibre optic continuity tester with modulated laser, in addition to cable and wire pair identification, for visual testing of fibre optic connections.



■■■	Type	Description
0.49452-7	KE7207	Active network tester and cable finder kit in a device case consisting of: KE7200, 2 Remote Units KE7010, KE701 Telco, PC Software, test cable set, batteries
0.49452-8	KE7208	Active network tester and cable finder kit in a device case consisting of: KE7200, 2 Remote Units KE7010, KE801 Fibre & Copper, PC Software, test cable set, batteries

Network and cable finder kits

Ethernet FLEXITEST series

The ideal sets for daily work in all types of networks without the need for documentation - save time and money during installation and troubleshooting.

KE7107

KE7107 consisting of network tester **KE7100 LANcheck** and the cable finder kit **KE701 Telco**, which allows the user to find additional cables and wire pairs in the shortest time without contact and allows the use on telephone, network and voltage-free electrical installations.

KE7108

KE7108 consisting of network tester **KE7100 LANcheck** and the cable finder kit **KE801 Fibre & Copper** in a sturdy plastic case incl. test cables and batteries. The KE801 allows the user to use the fibre optic continuity tester with laser for fibre optic connections in addition to cable and wire pair identification.



■■■	Type	Description
0.49451-7	KE7107	Network tester and cable finder kit in device case consisting of: KE7100, 1x Remote Unit KE7010, KE701 Telco, test cable set and batteries
0.49451-8	KE7108	Network tester and cable finder kit in device case consisting of: KE7100, 1x Remote Unit KE7010, KE801 Fibre & Copper, test cable set and batteries

KE8000

The optical power meter **KE8000** is a high-quality and easy-to-use instrument for testing optical networks and allows fast testing of fibre performance and attenuation.

AT A GLANCE

- Attenuation measurement from 800 - 1700 nm and measuring range from -70 to +3 dBm
- For single and multimode fibres
- Absolute power measurement in dBm
- Variable measuring adapter system
- LCD with backlight



Article number	Type	Description
0.49110	KE8000	Optical power meter for single and multimode fibres

Optical light sources

KE8100 – KE8200

The optical light sources **KE8100** and **KE8200** support the determination of fibre loss and continuity with stable laser signals when evaluating the transmission quality of single and multimode fibres.

AT A GLANCE

- KE8100: Multimode 850 and 1300 nm
- KE8200: Optical light source for singlemode: 1310, 1490, 1550 nm
- Variable measuring adapter system
- Robust, handy and easy to use
- Adaptation to other plug connections possible



Article number	Type	Description
0.49120	KE8100	Optical double light source for multimode fibres 850 and 1300 nm
0.49130	KE8200	Optical triple light source for singlemode fibres (1310, 1490 and 1550 nm)

Specifications fibre optic testers

	KE8000 optical power meter	KE8100 MM optical light source	KE8200 optical light sources
Fibre type	Multimode, Singlemode	Multimode (62,5/125 µm)	Singlemode (9/125 µm)
Wavelength range	800 to 1700 nm	850, 1300 nm	1310, 1490, 1550 nm
Calibrated wavelength in nm	850, 1300, 1310, 1490, 1550, 1625	-	-
Variable measuring adapter system	SC/PC, FC/PC, ST/PC, Univ. 2,5 mm	SC/PC, FC/PC, ST/PC, Univ. 2,5 mm	SC/APC, FC/APC, ST/APC, Univ. 2,5 mm
Detector / Transmitting diode	InGaAs	FP laser diode	DFB laser diode
Measurement range	-70 .. +3 dBm	-	-
Measurement accuracy	± 5 %	-	-
Power /attenuation measurement	in dBm oder µW/dB	-	-
Output level	-	> -10 dBm (Class I)	> -7 dBm (Class I)
Level stabilisation	-	< 0.1 db / 5 h; < 0.05 dB / 15 min	
Modulation	Automatic detection	CW and modulation: 270 Hz, 330 Hz, 1 kHz, 2 kHz	
Power supply	2x AA alkaline batteries	2x AA alkaline batteries	
Operating time	> 70 h with auto-off function	> 15 h with auto-off function	
Backlit display	2.4 " LCD	2.4 " LCD	
Operating temperature	-10 °C .. +50 °C	-10 °C .. +40 °C	
Dimensions	160 x 76 x 28 mm	160 x 76 x 28 mm	
Weight	210 g	220 g	
Included	Measuring device with fall protection, batteries and operation manual		
Article number	0.49110	0.49120	0.49130

KE850

The compact red light source KE850 EasyPoint is your perfect helper for daily use in optical LAN and telecom networks.

AT A GLANCE

- Power 1 mW, 650 nm wavelength
- Visual continuity test (VFL)
- Continuous light and pulsating mode selectable
- Universal connection with high-quality ceramic ferrule (2.5 mm)



III	Type	Description
0.49100	KE850	EasyPoint red light source 650 nm, in a case, batteries and manual

Fibre test sets

KE8001 – KE8083

Optical measuring kits - with and without KE850 red light source - for easy and fast attenuation measurement and fault detection during installation and maintenance.

III	Type	Description
0.49125	KE8001	Set consisting of KE8000, KE8100 MM
0.49125-8	KE8081	Set consisting of KE8000, KE8100 MM, KE850
0.49135	KE8002	Set consisting of KE8000, KE8200 SM
0.49135-8	KE8082	Set consisting of KE8000, KE8200 SM, KE850
0.49150	KE8003	Set consisting of KE8000, KE8100 MM, KE8200 SM
0.49150-8	KE8083	Set consisting of KE8000, KE8100 MM, KE8200 SM, KE850

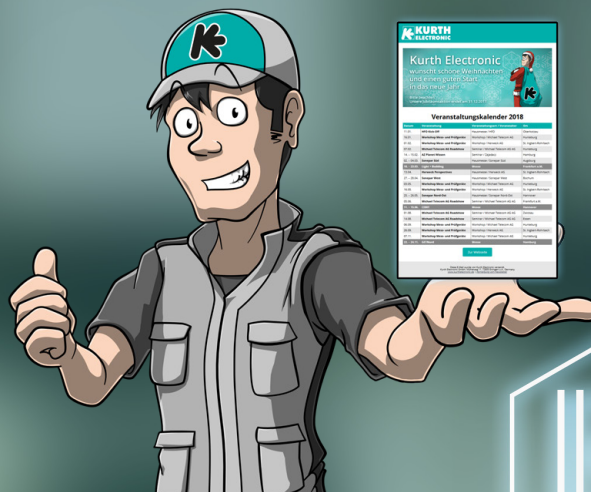


Image shows KE8083



Subscribe to our newsletter and don't miss any news from Kurth Electronic!

www.kurthelectronic.de/newsletter



G.fast

Super Vectoring

xDSL

LWL

KE301–KE801

The line tracer kits consist of **EASYTEST** and **PROBE** and enable any technician to find any type of cable, wires and wire pairs in the shortest possible time without time-consuming skinning work. Errors such as interchanges, overdrafts, interruptions and other faults in the cable are detected. The cable finders can be used for all types of cables such as telephone cables, bell lines, data cables of all classes, coaxial cables and voltage-free electrical lines.

The supply of the search signal to active telecommunication lines with up to 100 V voltage and numerous other functions make these devices a popular tool for installation companies.

KE301 Classic Kit

- For searching in telephone cabling and for wire pair identification
- RJ11 plugs & crocodile clips
- 120 V AC overvoltage protection



KE401 IT Kit

- For IT & telephone cabling and wire pair identification
- RJ11/RJ45 plugs & crocodile clips
- Data port test with portfinder function
- ISDN signal identification with Probe
- 120 V AC overvoltage protection



KE501 Electric Kit

- For electrical installations and cable identification
- 35 cm long fully insulated test cords with banana plugs and extra strong crocodile clips
- 500 V AC overvoltage protection*



KE701 Telco Kit

- For IT & telephone cabling and wire pair identification
- RJ11, RJ45 and 2x banana plugs with crocodile clips
- continuity test with LED and sound signal, resistance-dependent
- Data port test, portfinder function
- ISDN signal identification with Probe
- 500 V AC overvoltage protection*














KE801 Fibre & Copper

- **Worldwide unique combination**
- Includes the functionality of the KE701
- For IT & telephone, fibre optic and copper cable search and wire pair identification
- RJ11, RJ45 and 2x banana plugs with crocodile clips
- Red light source with 1 mW for fibre optic lines < 5 km
- Universal 2.5 mm ferrule for FO
- Coax F-socket
- 500 V AC overvoltage protection*



* Protects the device against accidental contact with 230 V mains voltage

III	Type	Description
0.49562	KE301	Cable and line tracer kit consisting of EASYTEST300 and PROBE310 with belt pouch
0.49563	KE401	Cable and line tracer kit consisting of EASYTEST400 and PROBE410 with belt pouch
0.49564	KE501	Cable and line tracer kit consisting of EASYTEST500 and PROBE510 with belt pouch
0.49567	KE701	Cable and line tracer kit consisting of EASYTEST720 and PROBE410 with belt pouch
0.49568	KE801	Cable and line tracer kit consisting of EASYTEST800 and PROBE410 with belt pouch

		KE301 Classic	KE401 IT	KE501 Electric	KE701 IT/Telephone	KE801 Fibre & Copper
Ideally suited for		<i>Telephone</i>	<i>IT/Telephone</i>	<i>Electric</i>	<i>IT/Telephone</i>	<i>IT/Tel./Fibre</i>
	Transmitter with crocodile clips and RJ11	■	■	Croco	■	■
	Signal feeding on active line 100 V	■	■	■	■	■
	RJ45 plug with data port finder	-	■	-	■	■
	Integrated laser light source (Class II) FO	-	-	-	-	■
	F-socket for coax	-	-	-	-	■
	Overvoltage protection	120 V	120 V	500 V	500 V	500 V
	Continuity test/Resistance measurement	■ / ■ LED	■ / ■ LED	■ / ■ LED	■ / ■ LED / Tone	■ / ■ LED / Tone
	ISDN signal detection LED on receiver	-	■	-	■	■
	LED flashlight function	■	■	■	■	■
	Stable, impact-resistant ABS housing	■	■	■	■	■
	Quality – Made in Germany	■	■	■	■	■

EASYTEST search signal transmitter

Test cords	Flexible Test cord Test cord connection	25 cm 2x Crocodile clips 1x RJ11 plug	25 cm 2x Crocodile clips 1x RJ11 plug 1x RJ45 plug	25 cm 2x Banana with extra strong crocodile clips and needle pins	25 cm 2x Banana with crocodile clips 1x RJ11 plug 1x RJ45 plug	25 cm 2x Banana with crocodile clips 1x RJ11 plug 1x RJ45 plug
	Additional test interfaces	-	-	-	-	2,5 mm universal PO ferrule Coax F-socket
Features	Continuity test	LED	LED	LED	LED + Tone	LED + Tone
	Resistance test by frequency change	■	■	■	■	■
	Low battery indication by flashing LED	■	■	■	■	■
	Automatic shutdown after 45 min.	■	■	■	■	■
	Deactivating the shutdown	■	■	■	■	■
	Device switch-on control with LED	■	■	■	■	■
	Display ALternating frequency with blinking LED	■	■	■	■	■
	Display SOLID frequency with steady LED	■	■	■	■	■
	Data port test through portfinder function	-	■	-	■	■
	Laser Light Source (VFL)	-	-	-	-	■
Search frequencies		6 frequencies selectable SOLID: 1000, 2600, 577.5 Hz and ALT: 1000/800, 2600/1900, 577.5 Hz pulsating Accuracy <±1% (quartz)				
Range		Maximum cable length up to 15 km without load Tone on short-circuited wire up to 250 m				
Transmitting power		High transmission power with 9 V battery 9.0 V PP without load 10 dBm at 600 Ω 9 dBm at 100 Ω 7.5 dBm at 50 Ω				
Overvoltage protection		120 V AC/DC	120 V AC/DC	500 V AC/DC	500 V AC/DC	500 V AC/DC
Dimensions/Weight		68 x 96 x 25 mm / 150 g without battery				
Additional features		Strain relief on the test cords Gold-plated contacts Separate battery compartment				

PROBE search signal receiver

Features	1 kHz filter Signal LED	■	■	■	■	■
	Flashlight function	■	■	■	■	■
	ISDN Filter Signal LED	-	■	-	■	■
Search distance		To cable maximum 60 cm, search depth under plaster maximum 15 cm				
Dimensions/Weight		220 x 40/34 x 25 mm / 80 g without battery				
Additional features		Non-conductive test tip made of carbon fibre reinforced plastic 3.5 mm headphone jack Gold-plated contacts Separate battery compartment				
General						
Power supply		9 V Battery > 100 hours operating time				
Housing		Sturdy, impact-resistant and weatherproof ABS housing with silicone operating buttons				

KE2093 Electric

The **KE2093** Line Tracer is a universal device for the search for concealed, floor and ground conductors as well as for the search for individual conductors in a bundle. Fuses belonging to a certain circuit can be determined. The cable finder helps the technician to easily find line faults (short circuits, cable breaks).

Can be used on live and voltage-free cables with up to 300 V AC.

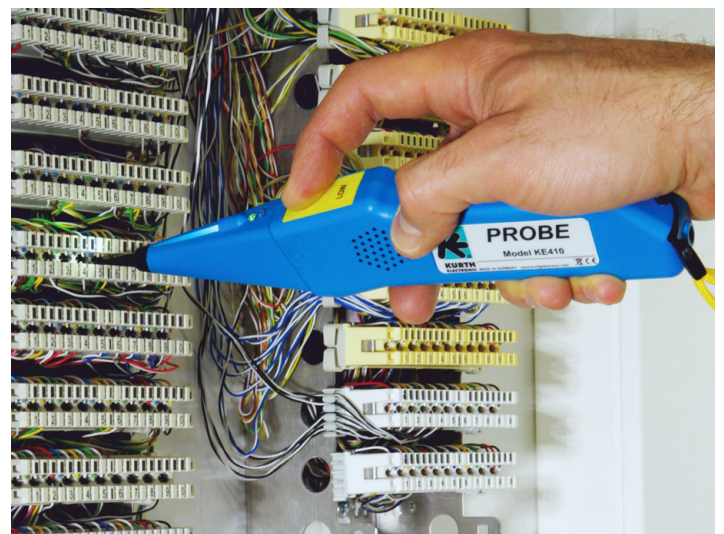


AT A GLANCE

- Tracking of cables in walls, ceilings, floors and soil
- Tracking of current-carrying and currentless lines with up to 300 V AC
- Localization of cable interruptions and short circuits
- Detection of concealed sockets and localisation of distribution boxes
- Determination of a single wire in a wire bundle
- Tracking of pipe installations and other conductive loops
- Localization of fuses and allocation to circuits
- Detection of the conductor up to a depth of 2 m possible
- Optional current clamp available

■ ■ ■	Type	Description
0.49570	KE2093	Line Tracer KE2093 tracking and searching system, set of transmitter and receiver, test leads and tips, carrying bag
A1019	Current clamp	Current clamp 1000 A / 1 A; connection to KE2093 Line Tracer in conjunction with A1068
A1074	Current clamp	Current clamp 200 A / 0.2 A; connection to KE2093 Line Tracer in conjunction with A1068
A1068	Connecting lead	Connecting cable for current clamps A1019/A1069/A1074 closed, connection to KE2093 Line Tracer

Usages



The **KE2500** is a telecommunications multimeter with a wide range of functions for troubleshooting in the telecommunications network.

The multimeter allows a detailed error analysis as well as an overview of the physical status of the tested line. The multifunctional and at the same time cost-effective test device is equipped with manual and automatable test sequences and has storage capacities as well as a cable database which contains numerous telecommunication lines.

The combination with the electronic long-distance line switch KE905 Remote is ideal for this purpose. With QR code support for digital order processing systems.

AT A GLANCE

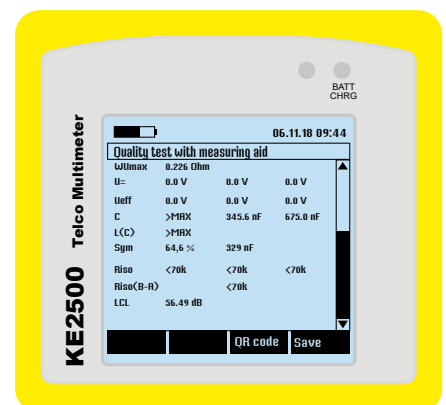
- Voltage AC/DC incl. AC frequency
- Resistance
- Line resistance and loop resistance with high immunity to interference
- Insulation and leakage
- Capacitance and capacitance symmetry
- Ground return resistance
- LCL symmetry at 1 MHz
- NEXT at 1 MHz
- PPA and signature detection
- Current AC/DC
- Automatic line measurement with/without meas. assistant e.g. KE905
- Database with common cable types and editable cable parameters
- Storage of measurements and data exchange via USB and QR code



KE2500	
Voltage	Measurement range: 1 mV–600 V (AC, DC, TRMS), Maximum voltage: 600 V Input impedance: > 9 MΩ DC, > 9 MΩ <50 pF AC, Low Z ca. 116 kΩ Resolution at 6,000 V: 1 mV, at 60 V: 10 mV, at 600 V: 100 mV Accuracy: DC 0.5 % / AC 1.5 % Overload: 600 V AC/DC Sinus perpetual
Current	Measurement range: ≥ 1 mA to ≤ 500 mA (AC, DC, TRMS), Maximum current: 950 mA Input impedance: < 0.8 Ω Accuracy: DC 0.5 % / AC 1.5 % at > 20 mA2 Overload: 0.95 A shutdown
Resistance	Measurement range: 0–300 kΩ Resolution 0–3 kΩ: 0.1 Ω, Resolution 3–30 kΩ: 1 Ω, Resolution 30–300 kΩ: 100 Ω Meas. curr. 0–3 kΩ: 2 mA, Meas. curr. 3–30 kΩ: 0.2 mA, Meas. curr. 30–300 kΩ: 20 μA Accuracy: ± 0.5 %–± 1.5 Ω Overload: 600 V AC/DC shutdown
Loop resistance	Measurement range: 0–2 kΩ Resolution 0–2 kΩ: 0.1 Ω Accuracy: ± 0.5 %–± 1.5 Ω Overload: 600 V AC/DC shutdown
Insulation 100 V	Measurement range: 70 kΩ–2 GΩ Accuracy 0–100 MΩ: 2 %, accuracy 100 MΩ–1 GΩ: 4 %, Accuracy 1 GΩ–2 GΩ: 8 % Maximum voltage: 120 V Short circuit current: < 9 mA Overload: 600 V AC/DC shutdown
Insulation 8 V	Measurement range: 1 kΩ–150 MΩ Accuracy 0–10 MΩ: 2 %, accuracy 10 MΩ–100 MΩ: 4 %, Accuracy 100 MΩ–150 MΩ: 8 % Maximum voltage: 70 V Short circuit current: < 9 mA Overload: 600 V AC/DC shutdown
Capacitance	Measurement range: 0 nF to 3 μF Input impedance: < 24 V peak voltage Max. resolution: 10 pF Accuracy 0–100 nF: 2 % ± 0.2 nF, accuracy 100–200 nF: 2 % ± 0.5 nF, Accuracy 200–400 nF: 2 % ± 1 nF, accuracy 400 nF–1 μF: 2 % ± 2 nF, Accuracy 1 μF–2 μF: 2 % ± 4 nF, accuracy 2 μF–3 μF: 2 % ± 10 nF Overload: 600 V AC/DC shutdown



Transmission of measurement results via QR code



Extensive automated measurements

Type	Description
KE2500	Telco Multimeter, fully insulated test cords with safety clamps CAT II 300 V, protective bag



NEW

KE3700 CT for DC and AC fault analysis with cable multimeter function including resistance fault localization, TDR function for cable fault location and measurements for line qualification up to 31 MHz.

The device allows the qualification of a copper wire pair on the service to be transmitted. Predefined or manually editable filters are available for xDSL or telephony services in the frequency range up to 31 MHz.

Manual and automatable test sequences in combination with the KE905 Remote electronic remote line switch are available to the user to simplify measurement tasks.

Bluetooth, QR code and the supplied KE Manager software allow flexible use with regard to documentation of measurement results or data transmission to electronic order processing systems.



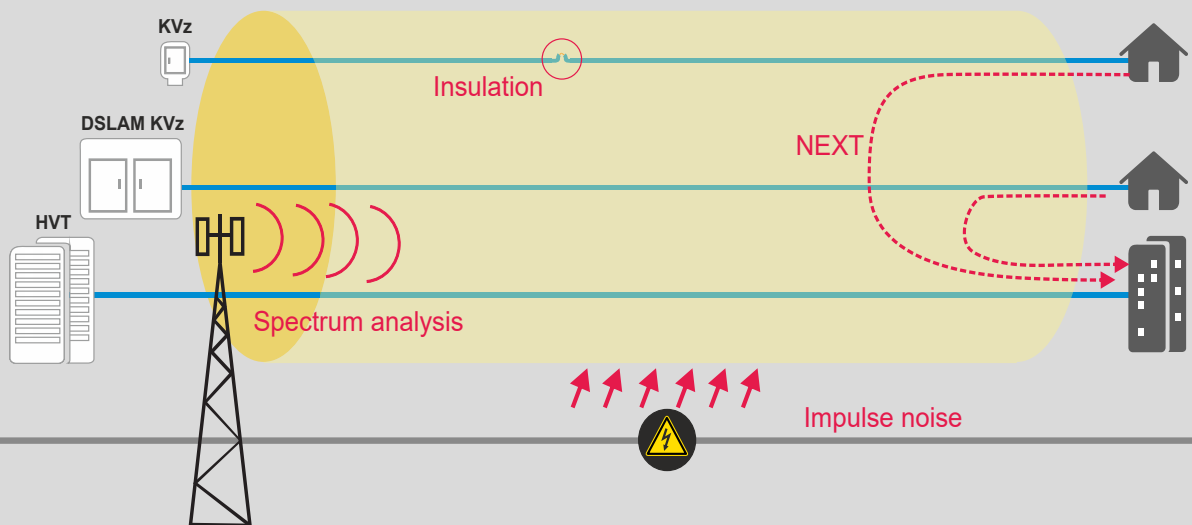
KE3700 CT

KE905 Remote

AT A GLANCE

- Spectrum analysis, Impedance, Return loss, LCL unbalance loss and NEXT, Input level (graph.), Signal level transmitter, Broadband and impulse noise
- Symmetry, resistance and capacitance
- Voltage AC/DC incl. AC frequency
- Insulation measurement with 8 V or 100 V
- RFL resistance fault localization according to Murray and Küpfmüller
- TDR identifies and localizes cable faults, with xTalk measurements
- Automated, freely editable test procedures
- Simplification and acceleration of the measuring application through the KE905 Remote included in the package
- Storage and evaluation of measurement data

USAGES



■	Type	Description
0.49840-CT	KE3700 CT	Telco line qualifier, incl. KE905 Remote, test cords, 12 V power supply, software, protective bag

Made in Germany



Line multimeter

General	<ul style="list-style-type: none"> Overvoltage protection with switchover to voltage measurement Measuring points selectable between A-B, A-GND and B-GND 	<ul style="list-style-type: none"> Test line compensation Display of min/max values 	
Conformance	Measurement range Resolution/Accuracy to 6 V to 60 V to 280 V Overvoltage protection	0 to 280 V DC 1 mV DC / ± 0,5 % + 2 Digits 10 mV DC / ± 0,5 % + 1 Digit 100 mV DC / ± 0,5 % + 1 Digit 300 V DC	0 to 200 V AC sinusoidal 1 mV DC / ± 1,5 % + 3 Digits ¹ 10 mV DC / ± 1,5 % + 3 Digits ¹ 100 mV DC / ± 1,5 % + 3 Digits ¹ 300 V AC sinusförmig
Frequency	Measurement range Resolution/Accuracy to 600 Hz to 6 kHz to 60 kHz	– – –	15 Hz to 60 kHz 0,01 Hz / ± 0,5 % + 1 Digit 0,1 Hz / ± 0,5 % + 1 Digit 1 Hz / ± 0,5 % + 1 Digit
Current	Measurement range Resolution/Accuracy Overvoltage protection	0 to 700 mA DC 0,1 mA DC / ± 0,5 % + 3 Digits 950 mA	0 to 500 mA AC 0,1 mA DC / ± 1,5 % + 5 Digits ² 950 mA
Insulation/Resistance Leakage	Measurement range Resolution/Accuracy to 30 MΩ to 300 MΩ to 3 GΩ	1 kΩ to 50 MΩ at 8 V test voltage 60 kΩ to 2 (5) GΩ at 100 V test voltage 10 kΩ / ± 2 % + 50 kΩ 100 kΩ / ± 2 % + 500 kΩ 1 MΩ / ± 2 % + 5 MΩ	
Loop resistance	Measurement range Resolution/Accuracy Loop length (short circuit) calculation Loop length resolution/accuracy	0 to 3 kΩ with DC mains voltage suppression 100 mΩ / ± 0,5 % + 0,5 Ω 0,1 m to > 20 km depending on cable parameters 0,1 m / ± 1 %	
Resistance	Measurement range Resolution/Accuracy	0 to 2 MΩ 4 Digits / ± 1 %	
Capacitance	Measurement range Resolution/Accuracy to 30 nF to 300 nF to 3 μF Line length (open) calculation Resolution/Accuracy to 100 m to 1 km > 1 km	0 to 3 μF (10 μF) 10 pF / ± 1 % + 100 pF 100 pF / ± 1 % + 500 pF 1 nF / ± 1,5 % + 5 nF 0,1 m to > 20 km depending on cable parameters 1 mm / ± 1 % 0,1 m / ± 1 % 1 m/± 2 %	
Ground resistance Station ground	Measurement range Resolution/Accuracy	0 to 2 MΩ 4 Digits / ± 1 %	
LCL @ 1 MHz Symmetry damping	Measurement range Resolution/Accuracy	0,01 to 90 dB 0,01 dB / ± 0,5 dB	
NEXT @ 1 MHz	Measurement range Resolution/Accuracy	0,01 to 125 dB 0,01 und 0,1dB / ± 0,5 dB	
RFL Resistance fault localization	Measurement range Resolution/Accuracy Line length (short circuit) calculation Resolution/Accuracy	0 to 3 kΩ via 2- and 3-wire method 100 mΩ / ± 0,5 % + 0,5 Ω 0,1 m to > 20 km depending on cable parameters 0,1 m / ± 1 %	
Note	Measurements via current clamp not possible ¹ Sinusoidal voltage > 5 % of end value 45 Hz .. 65 Hz, > 15 Hz or > 65 Hz .. 10 kHz additional error of ± 3 % + 5 digits. ² The TRMS converter causes a zero point deviation in the AC measurements of up to 30 digits.		

31 MHz line qualification

General	<ul style="list-style-type: none"> Frequency range 4.312 kHz to 31 MHz, manual input or xDSL bandwidth Cable shortening factor 0.33 to 3.33 10 mV DC 	<ul style="list-style-type: none"> Input impedance 100 Ω, 120 Ω Cable diameter 0.1 mm to 1.6 mm 	
Impedance	Display Resolution/Accuracy	0 .. 1000 Ω, graphical 0.1 Ω / ± 5 % or ± 5 Ω	
Reflection	Display Resolution/Accuracy	0 .. 100 dB, graphical 0.01 dB / ± 1 dB	
LCL (Balance)	Display Resolution/Accuracy 2 MHz/ 10 MHz/30 MHz	0 .. 100 dB, graphical 0.01 dB / ± 0,5 dB / ± 2 dB / ± 5 dB	
NEXT	Display Resolution/Accuracy	0 .. 130 dB, graphical 0.01 dBm / ± 1 dBm	
Recieve level measurement High impedance	Display Resolution/Accuracy	-100 .. 10 dB, graphical 0.01 dBm / ± 1 dBm	
Spectrum High impedance	Display Resolution/Accuracy	-100 .. 10 dB or -150 .. 10 dBm/Hz, graphical 0.01 dBm / 0.01 dBm/Hz / ± 1 dBm	Freeze function Comparison of two measurements
Wide band noise	Filter Display Resolution/Accuracy	ADSL 1,2 to 1,5 MHz / ADSL 2+ 3,0 MHz / VDSL2 8abcd to 9,0 MHz / VDSL2 12ab to 13,0 MHz / VDSL2 17a to 19,0 MHz / VDSL2 30a to 31,0 MHz dBm, numerical 0,01 dBm / ± 1 dBm	
Impulse noise	Impulse length Threshold Resolution Further output values Recording period	> 500 μs 0.1 mV to 25.4 mV / -20 to -59.9 dB 0.1 mV/0.1 dB Runtime in seconds/Number of noise pulses Unlimited	

TDR function

Time domain reflectometer	Measurement range Resolution of measurement/output Pulse Analogue gain Magnification	4 m to 6,000 m 6.26 ns or 0.1 m 12.5 ns to 2500 ns 0 dB to 56 dB in 10 dB steps Max. 10x	Freeze function Comparison of two measurements
----------------------------------	--	--	---

Additional information

Interfaces Operating temperature Storing temperature Humidity	2x 4 mm banana plugs (Line1 and Line2) touch protected for 3-pin TF connectors RJ45 1000 MB management port, RJ45 10/100/1000 MB test port 0 °C to +50 °C -10 °C to +60 °C Up to 93 %, non-condensing
--	---

The **KE901 measurement aid set**, consisting of KE905, the electronic line switch and the KE910 controller, enables enormous time and cost savings for cable fault measurements and the line qualification of telecommunications twisted pair(s). In addition, the use of this measuring aid greatly simplifies the inspection tasks of the technician.



KE910 Controller KE905 Remote

AT A GLANCE

- Switching bridges and switching lines remotely
- 4 pairs of cables or 3 measuring devices can be connected
- Customer management remains in service until measurement starts
- Remote switching up to 12 km possible
- Switching functions are confirmed acoustically and visually
- No influence on the lines up to 31 MHz
- Works with any test device – manufacturer-independent

KE905 Remote, the remote controllable line switch as a single device, ideal in combination with our copper testing devices.

AT A GLANCE

- Compatible with KE3700 + KECT, KE3550 + KECT, KE3700 CT and KE2500
- Direct control commands to the KE905
- Switching bridges and switching lines remotely

For specifications KE901/KE905 see www.kurthelectronic.de

Type	Description
0.49620	KE901 KE905 Remote + KE910 Receiver, test cable set, protectivepouch
0.49620-10	KE905 KE905 Remote for KECT, KE2500 and KE3700 CT



KE2100 Time Domain Reflectometer

The **KE2100** is a compact and handy cable fault locator, perfect for locating faults on all types of cables without service, such as twisted-pair cabling, telecom twisted pairs, coax and electrical. The short dead zone and the long range of up to 16 km allow a versatile use of this handy TDR.

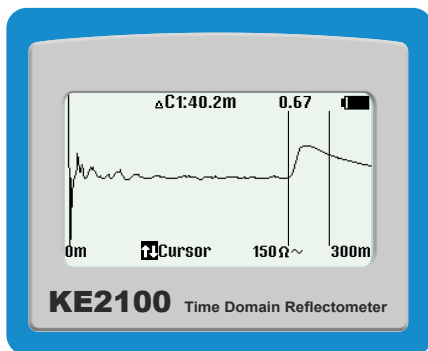
The integrated cable database also allows the addition and storage of further cable types. One or two cursors are available during a measurement, so that distances between two events can be measured easily.

To compare two different wire pairs, the KE2100 has a freeze function. This makes it easy to compare the representations of a frozen and a further measurement. The KE2100 has a high-resolution grayscale display that is easy to read, even in bright sunlight, so that even small events can be easily detected and calibrated.

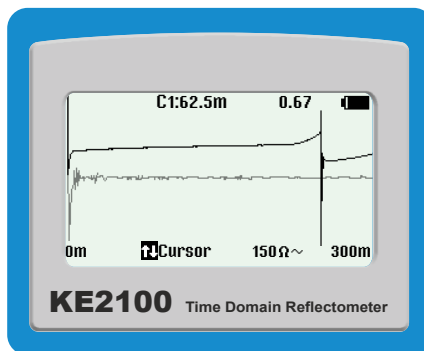
Measurement results can be stored in the device and transferred to a PC/laptop via Bluetooth. The bundled management software is used to manage the transferred measurement results and to generate measurement reports.



For specifications KE2100 see www.kurthelectronic.de



Two cursors facilitate evaluation



„Frozen“ measurement compared to a new measurement

At a glance

- AUTO mode for immediate use
- Can be used with all types of cables
- Maximum cable length up to 16 km/90 dB
- Freeze funktion and display in meter/foot
- Symmetrical search signal
- Resolution up to 0.3 m
- High-resolution, graphic display
- Operates on 4 AA (LR6) batteries
- Sturdy ABS housing
- Storing measurements and data transfer via Bluetooth



Type	Description
0.49210	KE2100 Time Domain Reflektometer up to 16 km, test cords, PC software and carrying case
0.57488	Adapter BNC Adapter 2x banana / plug to BNC Coax

TP09D analogue test telephone

TELCO TEST series

The handy, particularly robust and waterproof **analogue test telephone TP09D** with large, graphic display is characterised by its straightforward design and easy operation despite its wide range of functions.

All clearly arranged keys are available for DTMF dialing, including the special keys */#. Switchable to pulse dialling with different pulse/pause ratios. The TP09D measures line voltage and available current, displays Caller ID, name and, if available, other customer information. Reception and display of SMS and evaluation of DTMF in high-impedance monitor mode are possible.



Made in Germany

AT A GLANCE

- Voltage, current and polarity display
- Direct flash button / pulse and tone dialing
- Monitor with active and passive line, high impedance > 500 kOhm
- Displays calling number (CID) and (MWI)
- DTMF evaluation in monitor mode
- Charge pulse display 12/16 kHz and over-/undervoltage-lockout
- Protected according to IP54

III	Type	Description
0.49310	TP09D	Analogue test telephone with display, operating manual

CCTS-03 cable conductor test set with voice connection

TELCO TEST series

CCTS-03 Cable conductor test sets enable technicians to communicate on un-connected or wired lines.

In the case of newly laid or repaired cables with higher pairs, it is absolutely necessary to check the individual cores before closing the joints. With the CCTS-03 it is possible, quickly and easily, to check the individual cores for continuity, confusion, contact and earth fault. There is always a voice connection between the technicians. Due to the microprocessor-controlled adjustment, a clear distinction between A- and B-wire can be realized even with wired wire pairs with low impedance e.g. ISDN, xDSL etc.. It is no longer necessary to disconnect the line at the HVT/MDF and at the customer's site, which enables effective and time-saving work.



Made in Germany

AT A GLANCE

- Indispensable for commissioning, troubleshooting and fault rectification
- Test operation even on busy lines
- Microprocessor controlled adjustment
- Overvoltage protected
- Loop resistance test up to 2000 Ohm
- **2x CCTS-03 are required for testing**

III	Type	Description
0.49617	CCTS-03	Cable conductor test set CCTS-03, manual, test leads 1.5 m, 2x black and 1x red, 2x fully insulated clips KLEPS30 black, 1x test probe PRÜF2 red, 1x universal headset, 1x Cordura pouch

TalkSet analogue test headset

TELCO TEST series

The TalkSet consists of two lightweight headphone-microphone combinations with an analogue two-wire telephone connection. Telecom technicians can perform simple testing tasks on analogue lines, private branch exchanges, etc. Voice communication is possible when connected to active analogue telephone lines in conjunction with either a second TalkSet or an analogue telephone. In conjunction with a power source, voice communication can also be conducted via free, unpowered wire pairs.




























Made in Germany









AT A GLANCE






- For installation, commissioning, troubleshooting
- Disturbance-free in-house communication
- Checking cables and high-impedance monitor




III	Type	Description
0.49610	TalkSet	2x headset with microphone, 2x connection unit with test cords, crocodile clips and padded protective bag with belt loop





Accessories


■ ■ ■ ■	Type	Description	KE3700	KE3550
Accessories KE3700 and KE3550				
0.49604	Bluetooth earset	 Bluetooth earset with microphone, internal speaker and microphone are being deactivated!	■	■
0.49840-16	Car charger plug	 Car charger plug 12 V 1,5 A	■	■
0.57451-02	Protective glass, tempered	 Hardened real-glass display protection (hardness 9H), protects against scratches and fissures	■	■
0.49620-10	KE905 Remote	 Electronic line switch. Can only be used in conjunction with the KECT option. Control and execution of manual and automatic test procedures directly via the devices mentioned above.	■	■
0.49620	KE901 Remote set	 Measuring aid set, consisting of KE905 Remote (electrical line switch) and KE910 controller for manual control of the switching processes.	■	■
0.57740-10	Shoulder strap	 High-quality shoulder strap with Kurth Electronic logo	■	■
Test leads				
0.57727-10	Test lead	 Test lead RJ11 to banana plug with crocodile clips, length 1.5 m	■	■
0.57738	Test lead	 Test lead RJ11 to RJ45, length 1.5 m	■	■
0.57408-1500	Patch cable	 Patch cable RJ45, length 1.5 m	■	■
0.57890-1500	Copper test lead	 High-quality, symmetrical test lead for copper tests, national version, length 1.5 m	■	■
0.57890-1500 V2	Copper test lead	 High-quality, symmetrical test lead for copper tests, international version, length 1.5 m	■	■
0.57890-0750	Copper test lead	 High-quality, symmetrical test lead for copper tests, national version, length 0.75 m	■	■
0.57890-0750 V2	Copper test lead	 High-quality, symmetrical test lead for copper tests, international version, length 0.75 m	■	■
0.57930	Adapter cable TAE/ banana sockets	 Adapter cable TAE 2-pole, unencoded to banana sockets, length 20 cm	■	■
0.57947	ISDN test lead	 Test lead RJ45 to RJ45 ISDN cross-over, length 2 m, red	■	■
0.57945	Test lead	 SHDSL cable RJ45 to 8x banana	■	■
0.57946	Test lead	 SHDSL cable RJ45 to 4x RJ45	■	■
Power supplies				
0.49840-19EU	Power supply 12 V	 Power supply 220/110 V AC to 12 V, 2.0 A, EU version w/ interchangeable EU adapters (Not compatible w/ KE3600/KE3500)	■	■
Protective bags				
0.57618	Protective bag, small	 Protective bag with 1 equipment/ cable compartment, small version, width x height x depth 30 cm x 14 cm x 16 cm	■	■
0.57620	Protective bag, big	 Protective bag with 4 equipment/ cable compartments, large design, width x height x depth 38 cm x 20 cm x 20 cm	■	■
SFP accessories KE3700				
0.57100	SFP-ONT	 SFP module for GPON ONT modem emulation (replacement part)	■	■
0.57102	SFP-RJ	 10/100/1000Base-T SFP measuring insert for Gigabit Ethernet with RJ45 socket	■	■
0.57103	SFP-850	 1000Base-SX SFP measuring insert with DDM (Digital Diagnostic Monitoring) for Gigabit Ethernet, 850 nm MMF, 550 m with LC duplex socket	■	■
0.57104	SFP-1310	 1000Base-LX SFP measuring insert with DDM (Digital Diagnostic Monitoring) for Gigabit Ethernet, 1310 nm SMF, 20 km with LC duplex socket	■	■
0.57105	SFP-1550	 1000Base-ZX SFP measuring insert with DDM (Digital Diagnostic Monitoring) for Gigabit Ethernet, 1550 nm SMF, 40 km with LC duplex socket	■	■

■ ■ ■ ■	Type	Description
Accessories KE7200 and KE7100		
0.49416	KE7010 Kit	 4 remote units, 4x short patch cable, protective bag
0.49417	KE7010 PRO Kit	 4 remote units, Probe310, 4x short patch cable, protective bag
0.57407-0150	Patch cable, short	 Patch cable RJ45, length 15 cm
0.57408-0500	Patch cable	 Patch cable RJ45, length 50 cm
0.57485	Adapter RJ45-BNC	 Adapter RJ45 to BNC
0.58486	Adapter BNC-F-Female	 Adapter BNC to F-Female
0.57605	Equipment case	 Equipment case blue with Kurth Electronic imprint, for storage of <i>EASYTEST</i> - (KE301-KE801), <i>FLEXITEST</i> - (KE7100-KE7200) or <i>FIBRETEST</i> - (KE8000-KE8200) equipment. Including matching foam inlay (specify the inlay type when ordering).
0.57613	Protective bag	 Protective bag with device and cable compartment, suited for KE7100 and KE7200, including shoulder strap

Accessories KE301 – KE801		
0.49600	Earphone	 Earphone for PROBE 310/410/510 (hearing aid in noisy environment)
0.49700	Breakout adapter	 Breakout adapter set consisting of 6/8-pin RJ adapters for cables with RJ11/RJ45 connectors and breakout adapter with TAE-RJ11 adapter for RJ11 plug
1400070	FO Adapter	 FO adapter for 2.5 mm connection socket to 1.25 mm
1400078	FO Adapter	 FO adapter for 2.5 mm connection socket to POF
0.57773-VPE	Spare tips	 Test tips for PROBE 310/410/510 built 2009 or later, in packs of 3 pieces

Accessories KE2093		
A1019	Current clamp	 Current clamp 1000 A/1 A; connection to KE2093 Line Tracer in conjunction with A1068
A1074	Current clamp	 Current clamp 1000 A/0,2 A; connection to KE2093 Line Tracer in conjunction with A1068
A1068	Connecting cable	 Connection cable for current clamps A1019/A1069/A1074 for connection to KE2093 Line Tracer

Accessories KE8000 – KE8200							
Measuring cable SM 2 m, simplex		Measuring cable MM 2 m, simplex		Coupling Fibre, simplex		Plug-in adapters Fibre, metal	
							
■ ■ ■ ■	Typ	■ ■ ■ ■	Typ	■ ■ ■ ■	Typ	■ ■ ■ ■	Typ
0.57130	SC/PC – SC/PC	0.57134	SC/PC – SC/PC	0.57138	SC – SC (Plastic)	1400070	2,5 mm – 1,25 mm
0.57131	SC/PC – LC/PC	0.57135	SC/PC – LC/PC	0.57139	LC – LC (Plastic)	1400078	2,5 mm – POF
0.57132	SC/PC – ST/PC	0.57136	SC/PC – ST/PC	0.57128	ST – ST (Metal)		
0.57133	SC/PC – FC/PC	0.57137	SC/PC – FC/PC	0.57127	FC – FC (Metal)		

Universal equipment case		
0.57606	Equipment case, big	 L-Boxx 136 (Sortimo) Allround-Box black, including lid inlay and cutting inlay set as well as templates for cutting to size. Suited for accommodating the devices of the <i>MULTITEST</i> -, <i>FLEXITEST</i> - und <i>FIBRETEST</i> -series. Dimensions 44.5x35.8x15.2 cm

Further information and additional accessories are available on request.

Your partner for measuring and testing technology

Kurth Electronic is one of the leading manufacturers of measuring and testing devices for telecommunications, data technology and electrical installations. For over 40 years we have been developing and manufacturing innovative and user-friendly devices that make our customers' daily work easier.

- xDSL Multitesters
- Cable & line tracers
- LAN & ethernet testers
- LAN / Network test sets
- Cable fault locators
- ISDN testers
- Buried cable & pipe locators
- Fibre optic testing
- Cable conductor test sets
- Analogue test telephones



Kurth Electronic GmbH

Muehleweg 11
D-72800 Eningen u.A.
GERMANY

Tel. +49(0)7121-97 55-0
Fax +49(0)7121-97 55-56
info@kurthelectronic.de

www.kurthelectronic.de