PROGRAM 2021

Test and Measurement for Telecommunication / IT / Electric

KURTH ELECTRONIC

MADE IN GERMANY
KURTH ELECTRONIC since 1977

LAN
WAN
WLAN
xDSL
Data
G.fast
VoIP
IPTV

Content

MultiTest series: xDSL broadband testers

- KE3700 3
- KE3550 7
- Product matrix 10
- KE3100 and KE3150 11

FlexiTest series: Network testers

- KE7200 13
- KE7200 PRO Kit 14
- KE7207 and KE7208 14
- KE7100 15
- KE7107 and KE7108 16
- KE7010 16
- POEcheck 16
- Product matrix 17
- KE7200 Ethernet-Manager 17
- KE7000 18
- KE7301 – KE7801 19

FibreTest series: Fibre optic test solutions

- KE8000 20
- KE8100 20
- KE8200 20
- KE850 21
- KE8001 – KE8083 21

EasyTest series: Cable and line tracers

- KE301 – KE801 22
- Product matrix 23
- KE2093 23

CopperTest series: Cable fault meters

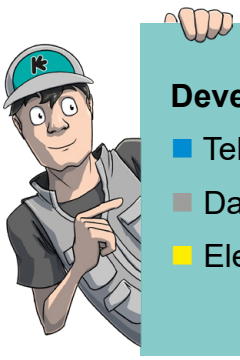
- KE2500 24
- KE3700 CT 25
- KE901 26
- KE905 26
- KE2100 27

TelcoTest series: Cable conductor test sets / analogue test telephone

- TP09D 28
- CCTS-03 29
- TalkSet 29

Accessories

- Accessories 30



Developed for:

- Telecommunications
- Data technology
- Electrical engineering

All-in-One: The next generation testing technology

KE3700 *xDSL MultiTest* is the perfect tool for service technicians from network operators and for ICT specialists.

The innovative and modular platform of KE3700 can be configured according to the requirements of the user. Numerous hardware and software options make it possible to combine the functions of several test devices in a single casing. Additionally, KE3700 can be retrofitted with a wide range of options, guaranteeing a high rate of return on investment and future viability.

The multifunctional KE3700 is ideal for installing and troubleshooting following broadband services: ADSL1/2/2+/SHDSL/VDSL2, VDSL2 Vectoring and the latest standards Super Vectoring (VDSL 35b) and G.fast. Thanks to the Ethernet interface for copper and optical fibres, KE3700 can also be used for testing in Gigabit networks based on FTTB and FTTH as well as in the local area network (LAN).

In addition to extensive test functions for the common telephony services **ISDN and analogue**, KE3700 is able to test VoIP telephony and evaluate voice quality based on relevant parameters. KE3700 supports standard **SIP, SIP trunk** and enables users to conduct up to 10 calls simultaneously (MultiCalling).

The **triple play test** functions of the all-rounder are completed with the IPTV service test function. The stream can be directly displayed in the screen, allowing technicians and customers to assess the streaming quality.

Users have the possibility to perform various tests in wireless networks. KE3700's **Wi-Fi option** supports VoIP and IPTV tests of the 2.4 GHz and 5 GHz bands as well as classic functionality tests.

With KE3700, important inspection tasks of the physical infrastructure (layer 1+2 of OSI model) can be performed precisely and efficiently using the KECT **cable fault measurement** module (can be integrated in the casing). A wide range of cable multimeter and TDR measurements are available for cable analysis and fault locations. These measurements are ideally performed in combination with the KE905 Remote Switch. It simplifies automated test sequences immensely and accelerates the measurement process.

The **RF measurement** functions help technicians to assess the quality of the copper pairs and to evaluate the service to be transmitted.

The **DMM Digital Multimeter** provides users with a fast testing option for important line parameters. It is an alternative to KECT, allowing faster evaluations on internal cablings.

Image shows KE3700 with Wi-Fi and SFP options

Several tests can be executed simultaneously thanks to the intuitive handling and the MultiTasking function. The fault diagnosis in the network is carried out as quickly as possible. Service disruptions caused by faults in the external or internal cabling or in the defective customer equipment can be reliably located.

The xDSL autodetection function enables automatic synchronisation. The at-a-glance display guarantees a clear presentation of the test-relevant line and the service parameters - no scrolling or menu switching needed.

KE3700's large colour display has a tempered glass protection which is perfectly readable under sunlight.

Measured values are displayed clearly and can be stored for documentation. They are managed with the included PC software. The transfer of the measurement results is also possible through QR code and via Wi-Fi. Stored measurements can be directly opened and viewed in detail.

Users have the opportunity to be introduced to the ideal handling of the KE3700 in our xDSL workshops.

Have a look at our product video!

At a glance

- ADSL–ADSL2+, VDSL2, VDSL2 (Vectoring / Super Vectoring), xDSL-Bonding and G.fast with auto service detection
- SHDSL support, 2 to 8 wires
- SFP port for digital diagnostic mode, optical level / power meter, triple play tests
- Maximum transfer rates for performance measurements in gigabit networks
- VoIP test incl. SIP trunk and MultiCalling with extensive statistics
- IPTV test with preview image and statistics as well as IPTV channel scan
- Wi-Fi connectivity and Wi-Fi testing for triple play tests (data, VoIP, IPTV) and web browser
- ISDN U_{K0} / S_0 / S_{2M} and analogue test phone function
- Coppertest (KECT), AC/DC measurements, resistance fault localization (RFL), TDR measurements
- High frequency measurements for line qualification up to 31 MHz
- Compatible with KE905 Remote for performing automated cable test sequences

xDSL
- ADSL–ADSL2+ Annex A/M/B/J
- VDSL2 incl. VDSL2 Vectoring, Super Vectoring (VDSL 35b) profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b

DSL Highspeed
- Super Vectoring (VDSL 35b), 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 via xDSL and Ethernet
- SIP-Trunk and QoS 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
- IPTV channel scan with display of switching time

Wi-Fi tests
- 2.4/5 GHz incl. SMA antenna
- WPA/WPA2, WEP, WPS
- Wi-Fi management interface
- Wi-Fi scan (SSID), send channel, signal strength
- Triple Play tests (Data/VoIP/IPTV)

Gigabit Ethernet ports
- Copper RJ45, Triple Play tests, Load generator
- SFP (Fibre) power meter, Digital Diagnostic Mode, Triple-Play-Tests, Load generator

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

Coppertest with KECT
- Telco Line Multimeter measurements for troubleshooting: current, voltage, insulation, resistance and capacitance, symmetry
- RFL measurement: Resistance fault localization after Murray and Küpfmüller
- TDR measurements for precise cable fault localization up to 6 km
- 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
- Manual or automatable measuring sequences possible (autotest)
- Compatible with KE905 Remote, direct control of the line switch at the remote end to simplify the measurement process

Digital Multimeter (DMM)
- DMM quick test for in-house telecommunications cabling: Voltage, resistance and capacitance

Image shows KE3700 with Fibre SFP module

Image shows KE3700 with KECT module

	Type	Description
Bundles		
TIP 0.49840-90	**KE3700 All-IP / Wi-Fi package**	0.49840 **KE3700 Base unit** ADSL-ADSL2+ Annex A / M or 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 optical fibre networks; 0.49840-17 **Wi-Fi Connect,** 2.4 / 5 GHz incl. SMA antenna; 0.49840-17-10 **Wi-Fi Tests**, Terminal mode
TIP 0.49840-91	**KE3700 All-IP package**	0.49840 **KE3700 Base unit** ADSL-ADSL2+ Annex A / M or 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 optical fibre networks
0.49840-92	**KE3700 Complete package**	0.49840 **KE3700 Base unit** ADSL-ADSL2+ Annex A / M or 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 optical fibre networks; 0.49830-25-4B3T **ISDN U_{K0} / S_0 / Analogue** Telephony option
0.49840-93	**KE3700 xDSL / LAN tester package**	0.49840 **KE3700 Base unit** ADSL-ADSL2+ Annex A / M or 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 optical fibre 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 / Coppertest package**	0.49840 **KE3700 Base unit** ADSL-ADSL2+ Annex A / M or 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 Coppertest module** (Cable multimeter); 0.49830-13-10 **HF measurements** for line qualification up to 31 MHz
xDSL Test device		
0.49840	**KE3700**	xDSL MultiTest, 1 GbE interface, ADSL 1/2/2+, Annex A / M or B / J, 8 GB storage, Bluetooth
xDSL / High speed options		
0.49830-20	**VDSL2 Vectoring**	Upgrade VDSL2 Vectoring, Super Vectoring (VDSL 35b) 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
xDSL Time Trace		
0.49840-21	**Time Trace**	Graphical display of parameters over the entire measurement time: Status, Sync, FEC, CRC, SNR margin, Transfer rate, Bitswap, Retransmission
Digital Multimeter		
0.49840-12	**DMM**	Digital multimeter: Voltage, resistance, capacitance, length
Coppertest upgrades		
0.49830-13	**KECT**	Line 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 fault localization after Murray and Küpfmüller, multisection support (0.49830-13 KECT required)
IP service tests		
0.49830-5	**VoIP**	VoIP terminal emulation with display of the quality parameters required for xDSL / Ethernet evaluation
0.49830-5-10	**VoIP MultiCalling**	Up to 10 parallel VoIP calls including statistics for xDSL / Ethernet (0.49830-5 VoIP required)
0.49830-6	**IPTV**	IPTV Set Top Box emulation with display of the quality parameters required for xDSL / Ethernet evaluation, stream preview
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)
0.49840-14	**Load Generator**	Load Generator for Ethernet interfaces (Copper and Fibre)
0.49840-15	**IP Speed Test**	Speed test with automatic server search. Display of host and target server, up- and download speed and ping runtime
Telephony options		
0.49830-25	**ISDN 2B1Q**	ISDN S_0-TE, U_{K0} and analogue interface with additional SFP port (must be activated with 0.49830-3-Soft). (4B2T also available)
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)
0.49830-3-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

Multifunctional & affordable performance tester

KE3550 *xDSL MULTITEST* is a multifunctional and modular test device for a very affordable price.

KE3700's little brother convinces most ICT specialists and service technicians with its extensive equipment. The device is a high-performance companion for copper-bound and **wireless networks**.

KE3550's basic configuration already supports ADSL1/2/2+, VDSL2 including VDSL2 vectoring and the latest VDSL2 standard SuperVectoring (VDSL 35b). It connects automatically to the respective service which accelerates and simplifies measurement operations significantly. KE3550 can be extended to test G.fast.

In addition to the xDSL interface, KE3550 offers a **Gigabit Ethernet** interface, which also enables TCP/IP tests and HTTP/FTP performance tests in order to evaluate the performance of the connection.

KE3550 can function as an **end-point** (terminal mode), router or modem, helping technicians to isolate faults caused by damaged customer equipment more efficiently.

Also available for users: test functions for ISDN, analogue and VoIP telephony (including the determination of relevant parameters for the assessment of voice quality). In addition to standard SIP, KE3550 also supports SIP trunk and MultiCalling for up to 10 concurrent VoIP calls.

The IPTV test and scan function of KE3550 completes the extensive possibilities for testing triple play services.

Data, VoIP and IPTV functionality can also be reviewed and evaluated in the 2.4 GHz and 5 GHz wireless band using the Wi-Fi options.

The KECT cable fault measuring module can also be integrated in the casing. Cable multimeter and TDR measurements for cable analysis and fault location as well as HF measurement functions for quality assessment of the copper pair, help technicians with their measurement tasks in the cable network. In combination with the KE905 Remote line switch, automated measurement sequences are possible. They optimise the performance of measurements even more.

As a simple alternative to KECT, the DMM Digital Multimeter option is also available to the user. Its main focus is the fast check of in-house telecommunications cabling.

Image shows KE3550 with VoIP option

The large colour display is protected by tempered glass and can be read under sunlight. The at-a-glance display provides a clear overview of test-relevant lines and service parameters and enables intuitive operations without time-consuming menu switching. The MultiTasking feature allows multiple tests to be carried out simultaneously.

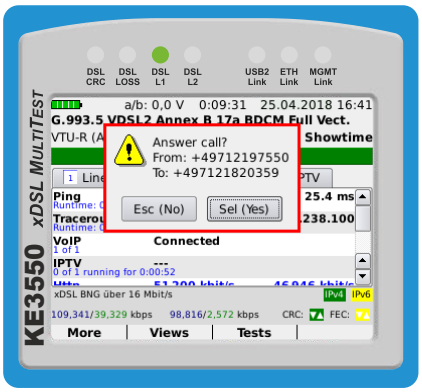
Measured values are displayed clearly and can be stored for documentation and managed with the included PC software. The transfer of measurement results is also possible through QR code and via Wi-Fi. Stored measurements can be opened and viewed in detail directly on the KE3550 or on the PC.

Users have the opportunity to be introduced to the ideal handling of the KE3550 in our xDSL workshops.

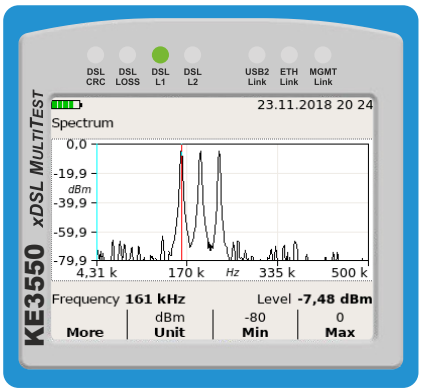
Have a look at our product video!

At a glance

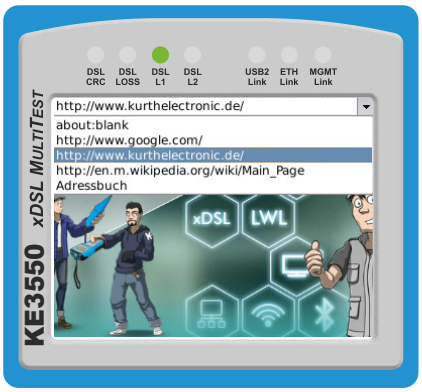
- ADSL–ADSL2+, VDSL2, VDSL2 (Vectoring/Super Vectoring), xDSL-Bonding and G.fast with auto service detection
- Maximum transfer rates for performance measurements in gigabit networks
- VoIP test incl. SIP trunk and MultiCalling with extensive statistics
- IPTV test with preview image and statistics as well as IPTV channel scan
- Wi-Fi connectivity and Wi-Fi testing for triple play tests (data, VoIP, IPTV) and web browser
- ISDN U_{K0}/S_0/ S_{2M} and Analogue Test Phone Function
- Coppertest (KECT), AC/DC measurements, resistance fault localization (RFL), TDR measurements
- High frequency measurements for line qualification up to 31 MHz
- Compatible with KE905 Remote for performing automated cable test sequences



Incoming VoIP call



Spectrum Analysis DSL Handshake Tones



Web browser

Features KE3550

xDSL
- ADSL–ADSL2+ Annex A/B/J/B
- VDSL2 incl. VDSL2 Vectoring, Super Vectoring (VDSL 35b) Profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b

DSL Highspeed
- Super Vectoring (VDSL 35b), 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)

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), send channel, signal strength
- Triple Play tests (Data/VoIP/IPTV)

Gigabit Ethernet port
- Copper RJ45, Triple Play tests

ISDN/Analogue test phone
- ISDN S_0/U_{K0}/Analogue
- Extensive measurement functions
- BER test (Bit error rate test)
- D-channel monitoring

Coppertest with KECT
- Telco Line Multimeter measurements for troubleshooting: current, voltage, insulation, resistance and capacitance, symmetry
- RFL measurement: Resistance fault localization after Murray and Küpfmüller
- TDR measurements for precise cable fault localization up to 6 km
- 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
- Manual or automatable measuring sequences possible (autotest)
- Compatible with KE905 Remote, direct control of the line switch at the remote end to simplify the measurement process

Digital Multimeter (DMM)
- DMM quick test for in-house telecommunications cabling: Voltage, resistance and capacitance

	Type	Description
Bundles		
TIP 0.49815-90	**KE3550 All-IP / Wi-Fi package**	0.49815 **KE3550 Base unit** ADSL-ADSL2+ Annex A/M or 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**	0.49815 **KE3550 Base unit** ADSL-ADSL2+ A/M or 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**
TIP 0.49815-93	**KE3550 xDSL / LAN tester package**	0.49815 **KE3550 Base unit** ADSL-ADSL2+ A/M or 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 A/M or B/J **and VDSL 2 Vectoring / Super Vectoring** (Profiles 8a/b/c/d, 12a/b, 17a, 30a, 35b)
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 Profil 17a, 30a)
xDSL Time Trace		
0.49840-21	**Time Trace**	Graphical display of parameters over the entire measurement time: Status, Sync, FEC, CRC, SNR margin, Transfer rate, Bitswap, Retransmission
Digital Multimeter		
0.49840-12	**DMM**	Digital multimeter: Voltage, resistance, capacitance, length
Coppertest upgrades		
0.49830-13	**KECT**	Line 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 fault localization after Murray and Küpfmüller, multisection support (0.49830-13 KECT required)
IP service tests		
0.49830-5	**VoIP**	VoIP terminal emulation with display of the quality parameters required for xDSL / Ethernet evaluation
0.49830-5-10	**VoIP MultiCalling**	Up to 10 parallel VoIP calls including statistics for xDSL / Ethernet (0.49830-5 VoIP required)
0.49830-6	**IPTV**	IPTV Set Top Box emulation with display of the quality parameters required for xDSL / Ethernet evaluation
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
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)
0.49840-15	**IP Speed Test**	Speed test with automatic server search. Display of host and target server, up- and download speed and ping runtime
Telephony upgrades		
0.49810-25	**ISDN 2B1Q**	ISDN S_0-TE, U_{K0} and analogue interface (4B3T also available)
KE Manager option		
0.49830-15	**Real time analysis**	Detailed viewing of a running measurement on a PC and evaluation of long-term measurements

Product matrix

■ standard ☐ available optionally – not available

	KE3700 MULTITEST	KE3550 MULTITEST
ADSL – ADSL+, Annex A / B / J / M	■	■
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)	☐	–
Digital Multimeter (DMM)	☐	–
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	■	■

NEW

Unique, compact & affordable: xDSL availability & activity tester

With the xDSL Detection Kits, technicians are able to contact-free detect the availability and activity of classic and IP-based DSL connections.

The **KE890/895 *xDSL Check*** can activate an inactive DSLAM/ISAM at the remote end of a wired line to indicate the availability of a DSL service and the Annex variant via LED: Annex A/M (DSL via POTS), Annex B (DSL via ISDN) or Annex J (All-IP). All current xDSL services according to ITU-T G.441 such as ADSL or VDSL2 as well as the new SuperVectoring (VDSL 35b) and G.fast technology are supported.

With the **KE420 xDSL PROBE**, wire pairs which carry active xDSL signals can be detected contactlessly. The active services are neither disturbed nor do they lose their connection. This way, the lines carrying an active xDSL signal in the switching center, the cable splitter, the house transfer point or the building, can be easily detected.

The Ethernet link test detects active (patched) network connections: it quickly identifies the corresponding port on the switch by using the link blink function.

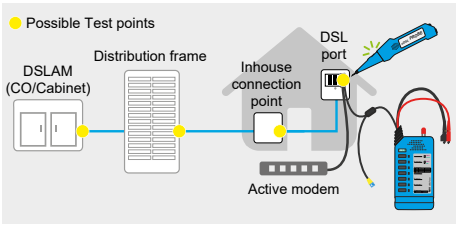
In addition, **KE3150** has an integrated light source (VFL) which is available for visual tests on optical fibre. It can be used to test singelmode/multimode optical fibre cables visually as well as other components for breaks and continuity. Optical fibre cables in a bunch can be localized and assigned.

KE3100 and **KE3150** are equipped with a line tracer function in order to identify specific lines in telephony-, data-, and coax installations as well as cables in voltage-free electrical installations. Cables can be located in cable channels or walls. Wire pairs, even reversals and split pairs can be detected. A continuity test with resistance-dependent tone frequency helps technicians to determine the copper cable's condition.

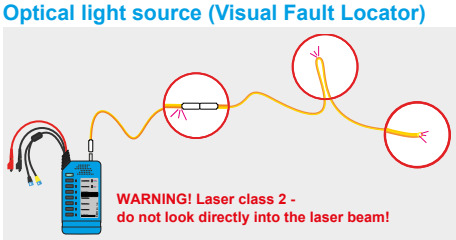
Image shows KE3150

Have a look at our product video!

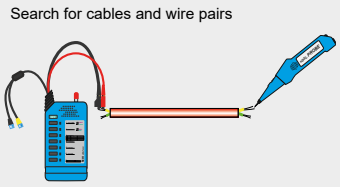
xDSL Tests



Optical light source (Visual Fault Locator)



Line tracing



At a glance

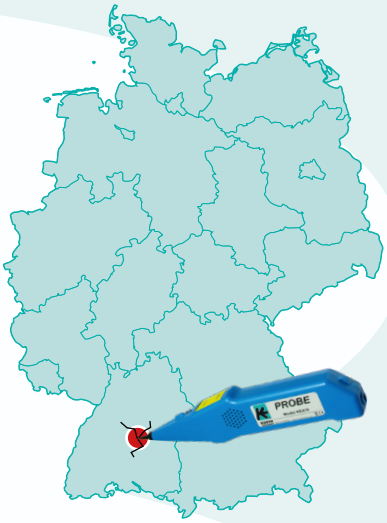
- xDSL availability test: ADSL, VDSL2, G.fast
- Detection of the Annex variant: DSL/All-IP, DSL/ISDN, DSL/POTS
- Contactless detection of active DSL signals
- ETH link test, LAN port finder
- KE3150: Visible light source for fibre optic fault location (VFL)
- Cable finder function

	Type	Description
0.49800	**KE3100**	xDSL Detection Kit consisting of: *KE890 xDSL Check* and *KE420 xDSL Probe* with protective bag
0.49801	**KE3150**	xDSL Detection Kit consisting of: *KE895 xDSL Check* and *KE420 xDSL Probe* with protective bag

Where are we from?

... from the foot of the Swabian Alb,
just a few kilometers south of Stuttgart...

... that's from where we send out all our
MADE IN GERMANY devices to the whole world.



Where to meet us?

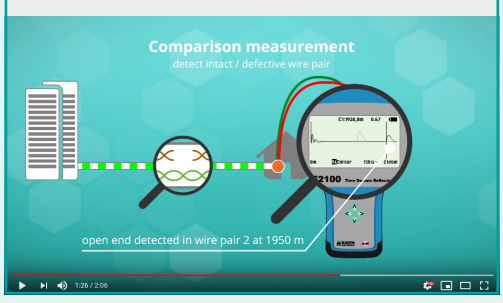
Trade fairs: You can find us at numerous trade fairs where we love to introduce you to our latest products and technologies: visit us on **www.kurthelectronic.de/events** and find out more about your next events.

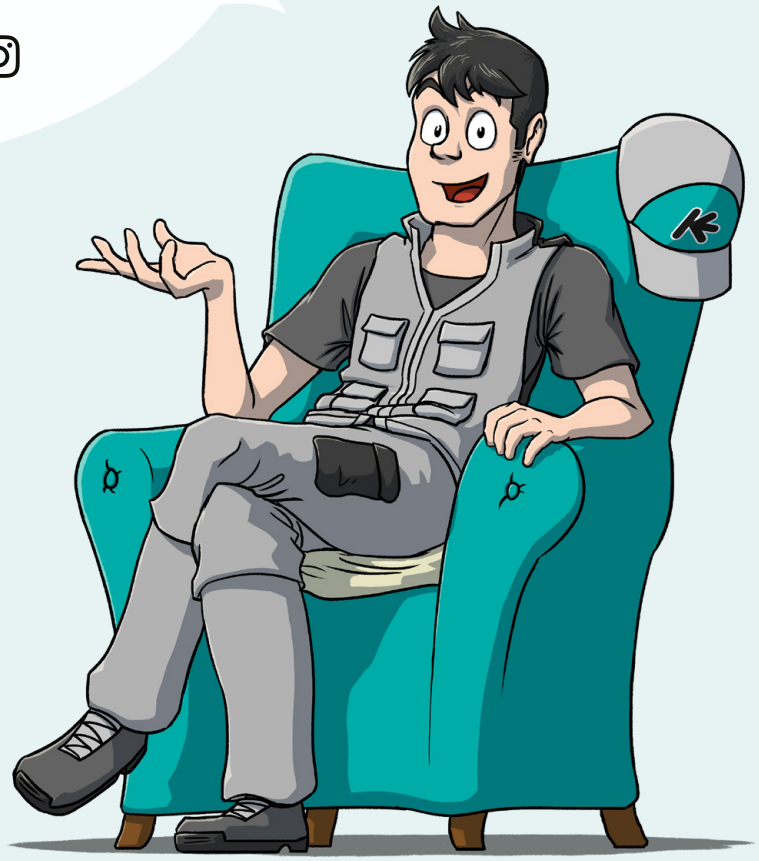
Stay up to date!

On our website, LinkedIn, Xing and YouTube you will always find the latest news about Kurth Electronic and our products.

www.kurthelectronic.de

Visit our **YouTube channel** with product presentations and user videos!





The ideal help for launching tests, troubleshooting and documentation in data and ICT networks

The **KE7200 Ethernet Performance Tester** is the ideal help for network commissionings, troubleshooting and documentations in data and telecommunications networks.

The large graphic display, the innate handling, the long battery life as well as the robust case are perfect conditions for high duty daily use.

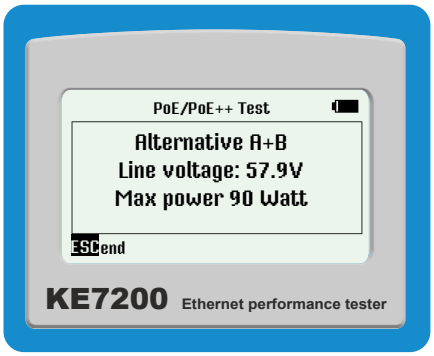
KE7200 checks wires and wire pairs of cable sections for continuity, breaks, short-circuits, swaps and split pairs. In case of short-circuits and breaks, it defines the distance to the fault location through a precise TDR. Unknown cable and wiring schemes are past with the user-definable internal cable database. KE7200 is able to manage up to 32 individual remote units simultaneously and allows technicians and customers to save valuable time.

KE7200 checks connections on the availability of Power over Ethernet (PoE, PoE+ and PoE++) and defines the available power via a true load test.

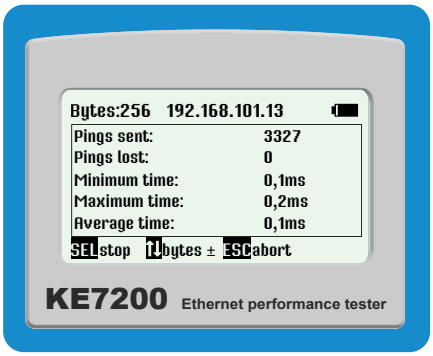
Active network tests, such as the detection of the link speed in 10/100/1000 Mbit networks, the listing of the existing network participants incl. name, IP and MAC address of the participant as well as the configurable ping stress test with detailed statistics, inform the user about the network and the possibly faulty factors.

The link LED on the switch is activated using the port finder function. It highlights active data ports at the switch of the remote line end. The integrated tone transmission mode enables clear line assignment with unconnected ports (using the optional PROBE310 search signal receiver).

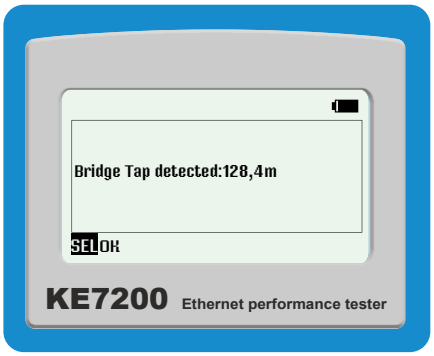
Kurth Electronic's optional software for detecting branches (which can massively impair the operation of xDSL services through signal refelction) in the in-house telecommunications cabling is the ideal support for the telecommunications network specialist. KE7200 determines the existence of a branch in the connected 2-wire line and at the same time the distance to the branch.



PoE to PoE++ test



Ping stress test to detect faulty network components



Detection of Bridge Taps

At a glance

- Detection and localization of cable faults from 1 wire pair upwards incl. Profinet
- Storing 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

Have a look at our product video!

	Type	Description
0.49420	**KE7200**	Active network tester with 2 remote units KE7010, 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.

All you need to test Ethernet cabling and networks

KE7200 PRO Kit

KE7200 PRO Kit is a network tester set with expanded accessories.

The **KE7200 Pro Kit** contains KE7200, 4x KE7010 remote units, Probe310, PC software, test cables, protective bag. The Probe 310 serves as search signal receiver of the KE7200's sound transmission mode and allows line search and mapping.

	Type	Description
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

Sets for testing and troubleshooting in ICT networks

Professional sets for installation and troubleshooting, with the capability to create individual measurement protocols. The perfect solution for efficient work in active and passive ICT networks.

KE7207

KE7207 consists of the active network tester **KE7200** and the line finder kit **KE701 Telco**. It comes in a shockproof protective case including test cables, PC software and batteries. KE701 Telco also enables user to find cables and wire pairs in the shortest time possible without any touch and allows the use in telephony, network and voltage-free electrical installations.

KE7208

KE7208 consists of the active network tester **KE7200** and the line finder kit **KE801 Fibre & Copper**, which enables the user to use the optical fibre continuity tester with modulable laser, in addition to cable and wire pair identification, for the visual inspection of optical fibre connections.

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

Handy and cost-effective network tester

The **KE7100 LANcheck** is an easy-to-use, handy and cost-effective LAN tester with a wide range of functions. KE7200's little brother is ideal for measurements in ICT networks where no documentation is needed.

KE7100 checks wires and wire pairs of cable sections for continuity, interruption, short circuit, swap and overdraft (split pair). It simultaneously defines their length, and, in the case of interruption and short circuit even defines the precise fault location.

KE7100 also tests telecommunication lines up to a length of 200 m and determines the distance to the end of the line or the point of a possible interruption.

The integrated, user editable cable database stores up to 16 known network cables. Unknown cabling is past thanks to the possibility of creating personalised wiring profiles. The wiring database of KE7100 contains numerous predefined wiring profiles, starting from one wire pair upwards.

To simplify and accelerate measurements, KE7100 supports up to 32 remote units connected to the remote end of the line. Using multiple of these KE7010 remote units saves time.

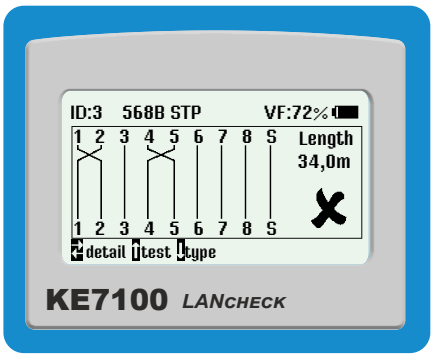
To help with the detection of active data ports, KE7100 displays link activity in 10/100/1000 Mbps networks.

The port finder function activates the link LED of a switch at the far end and allows the visual identification of the network connection at the switch.

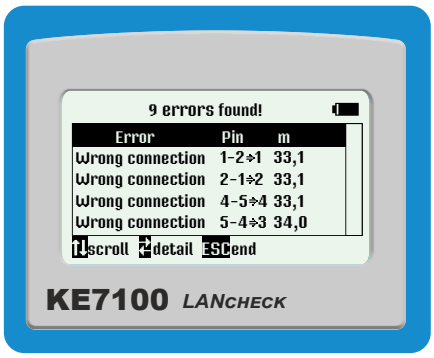
KE7100 has a Power over Ethernet test to simplify the installation of IP telephones, IP cameras, etc. The test determines whether the network connection or the switch at the remote end can supply PoE. It also shows with how much power the terminal device is provided. The availability and load test supports PoE, PoE+ and even PoE++, with a power consumption of up to 90 watts.

In passive networks the tone send mode of KE7100 (which can be used in combination with the optional search signal receiver Probe 310) is able to find the port.

The KE7107 and KE7108 sets are our complete solutions including both network tester and line finder.



Clear indication of wiring errors



List of errors with distance

Have a look at our product video!

At a glance

- LAN tester with split pair detection
- Detection and localization of cable faults from 1 wire pair upwards incl. Profinet
- TDR cable length measurement up to 200 m
- Configurable cable database from 1 pair upwards
- Power over Ethernet load test (IEEE802.3af/at/bt)
- Portfinder function
- Integrated cable database
- Detection of 10/100/1000 Mbit/s connections
- Overvoltage protection up to 100 V

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

KE's contact-free sets for testing and troubleshooting in ICT networks

The ideal sets for daily work in all types of networks – save time and money during installation and troubleshooting.

KE7107

The KE7107 consists of the network tester **KE7100 LANcheck** and the cable finder kit **KE701 Telco**. It allows users to find additional cables and wire pairs contact-free in the shortest time. It also enables the use on telephone, network and voltage-free electrical installations.

KE7108

KE7108 consists of the network tester **KE7100 LANcheck** and line finder kit **KE801 Fibre & Copper**. In addition to cable and wire pair identification, KE801 also enables customers to use the optical fibre continuity tester with laser for optical fibre connections.

	Type	Description
0.49451-7	**KE7107**	Network tester and cable finder kit in protective 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 protective case consisting of: KE7100, 1x Remote Unit KE7010, KE801 Fibre & Copper, test cable set and batteries

KE7010 Remote

Ethernet FLEXITEST series

KE7010 Remote Unit for KE7100 and KE7200.

At a glance

- LED visual indication 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

POEcheck

Ethernet FLEXITEST series

Power over Ethernet tester

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 IEEE 802.3af standard). To see the result, simply plug the patch cable of the device into the POEcheck or connect the POEcheck with the bundled test cable to the data socket.

At a glance

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

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

Product matrix

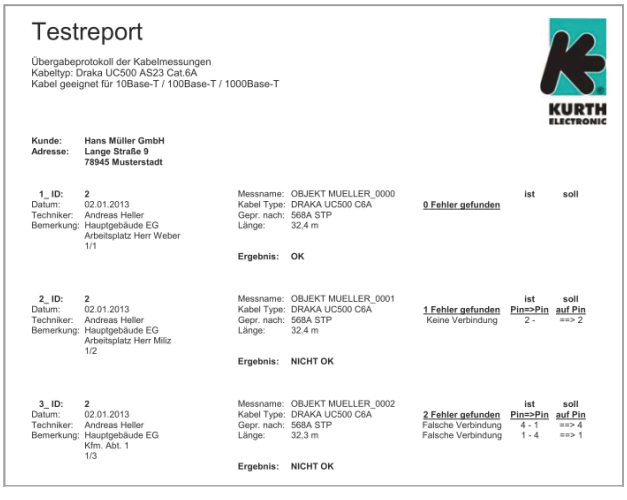
■ standard ☐ available optionally – not available

	KE7200	KE7100	KE7000
Easy to read display with clear visualization of cable status	■	■	■
Checks cabling for interruption, continuity, short circuit, interchanging, shielding	■	■	■
Detection of split pair errors	■	■	–
Testing of the wiring with pin and pair assignment (Wiremap)	■	■	–
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 configuarble remote units / number of bundled units	■ / 2	■ / 1	–
Optional: Bridge Tap detection for 2-wire lines (4 – 5)	☐	–	–
Overvoltage protection up to 100 V	■	■	60 V
Impact-resistant, sturdy casing	■	■	■

KE7200 Ethernet Manager

Ethernet FLEXITEST series

The cable measurements and active network information stored on the KE7200 can be managed and edited with KE's free-of-charge PC-software. Kurth Electronic's 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

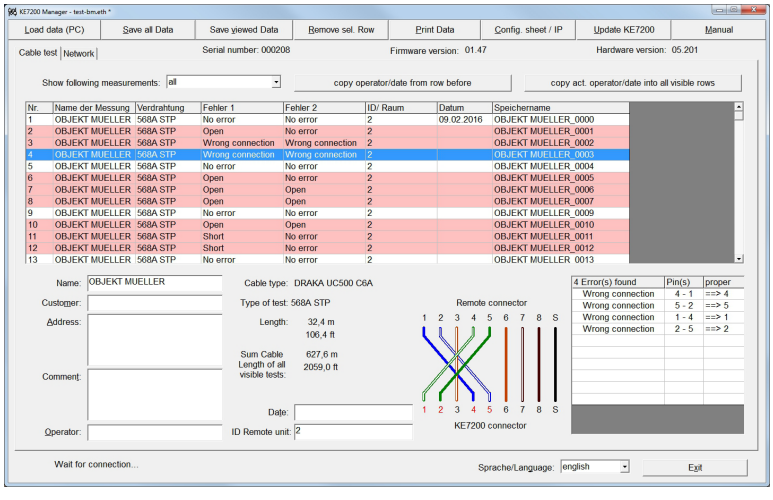
KURTH ELECTRONIC

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

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

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

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



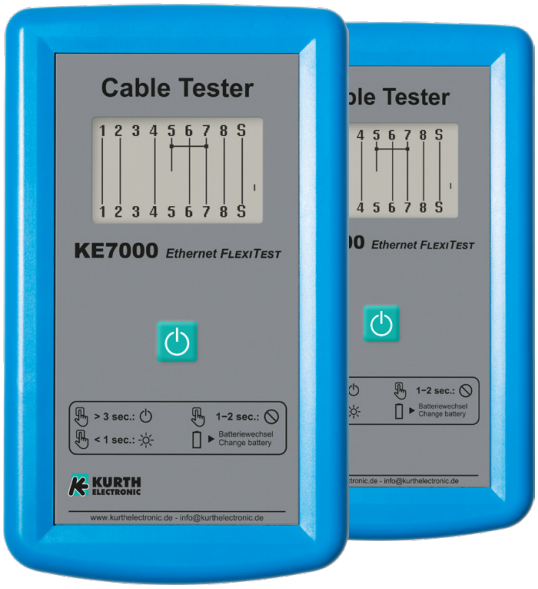
NEW

Cost-efficient cable testers Made in Germany

Kurth Electronic's **KE7000** are cost-effective test devices for patch, LAN and telecommunications cabling as well as for coaxial cables (only with additional adapter). KE7000 test and verify unshielded and shielded connection cables with twisted pairs (UTP, STP cables) within installed networks or patch cables. BNC and F-socket coaxial cables can be tested for continuity using the optional RJ45 coax adapter. No user confusion thanks to the master-slave autonegotiations. Additionally, both units show the test results on their displays, saving valuable time. With a battery life of up to 100 hours, the measuring operation rarely needs to be interrupted.

Occurring errors such as mix-ups, interruptions, short circuits and screen errors are shown on both LCD displays. No more need to take notes of blinking and flashing LEDs: the KE7000 provide clear, fast and immediately evaluable status information on both ends, for cable lengths up to approx. 150 m.

KE7000 warn the user if external voltage is applied to the tested cables and indicate the connections between the polarities and the pins. The devices are protected against overvoltage up to 60 V.

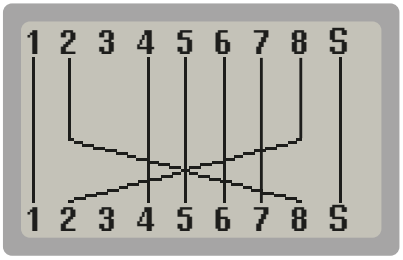


At a glance

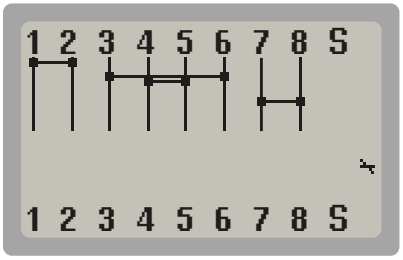
- Phone (RJ11), data (RJ45) and optionally Coax lines
- Continuity, open, short, reversals, shield and shows multiple faults
- Master-slave autonegotiation
- Error depiction on both units
- Detection of active switches at remote line end
- Clear display of cable status
- Overvoltage protection up to 60 V
- Cost-effective and robust

Coax adapter set available optionally

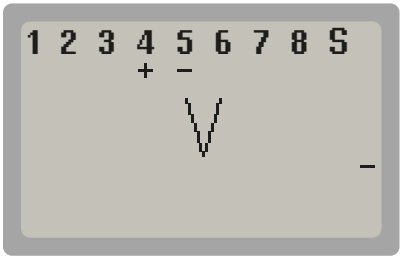
Have a look at our product video!



Pin 2 and 3 twisted, break at pin 3



Active switch at remote end of the line



Voltage display incl. polarity display

	Type	Description
0.49470	**KE7000 Cable tester set**	Cable tester set, consisting of 2x KE7000
0.57485-10	**Adaptor RJ45-Coax**	Adaptor-Set RJ45 to Coax, consisting of 2 pcs. of each Connector, RJ45 to BNC as well as BNC to F-Female

NEW

The ideal basic equipment for troubleshooting in ICT networks

The KE7000 cable tester and cable finder sets **KE7301 – 7801** are the must-have equipments for all technicians looking for cables and faults in telephone and data networks.

The **KE7301 set** includes the KE301 Classic Kit. It contains a RJ11 connector, two crocodile clips, a continuity test via LED and is equipped with overvoltage protection up to 120 V.

The **KE7701 set** includes the KE701 Telco Kit and comes with a RJ45 connector for detecting active network connections and assigning the active data port to e.g. the switch. A continuity test with a resistance-dependent tone enables a quick assessment of the cable condition. The KE701 Telco Kit is protected against accidental contact of 230 V mains voltage through an overvoltage protection up to 500 V.

On top: The **KE7801 set** with the unique KE801 Fibre & Copper Kit extends the functions with a red light source. It enables visual continuity testing in fibre optic networks (VFL). The coax F socket also allows the tracking of coaxial cables.

All sets come with two KE7000.

Image shows KE7701

Product matrix

Ethernet FLEXITEST series

	KE7301**	KE7701**	KE7801**
KE7000 Cable tester set	■	■	■
RJ11 connector / Crocodile clips	■	■	■
RJ45 connector	–	■	■
Data port test / Portfinder function	–	■	■
Continuity test / Resistance test	■ / ■ LED	■ / ■ LED / Tone	■ / ■ LED / Tone
Overvoltage protection (KE7000* / KEx01**)	60 V* / 120 V**	60 V* / 500 V**	60 V* / 500 V**
Integrated laser light source (VFL)	–	–	■

■■■	Type	Description
0.49470-3	**KE7301 Cable tester set**	Cable Tester Set, consisting of 2x KE7000 + KE301 Classic Line Tracer Kit incl. carrying case, batteries and adaptor set RJ45-Coax
0.49470-7	**KE7701 Cable tester set**	Cable Tester Set, consisting of 2x KE7000 + KE701 Telco Line Tracer Kit incl. carrying case, batteries and adaptor set RJ45-Coax
0.49470-8	**KE7801 Cable tester set**	Cable Tester Set, consisting of 2x KE7000 + KE801 Fibre & Copper Line Tracer Kit incl. carrying case, batteries and adaptor set RJ45-Coax

Universal optical power meter

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.

Have a look at our product video!

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 (PC)
- LCD with backlight

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

Robust multimode light source

KE8100

With stable laser signals, the **KE8100** optical light source support the determination of fibre loss and continuity, when evaluating the transmission quality of multimode fibres.

At a glance

- Optical light source for multimode (850 and 1300 nm)
- SC measuring adapter(PC)
- Robust, handy and easy to operate
- Adaptation to other plug connections possible

Robust singlemode light source

KE8200

With stable laser signals, the **KE8200** optical light source support the determination of fibre loss and continuity, when evaluating the transmission quality of singlemode fibres.

Have a look at our product video!

At a glance

- Optical light source for singlemode (1310, 1490 and 1550 nm)
- Variable measuring adapter system (APC)
- Robust, handy and easy to operate
- Adaptation to other plug connections possible

	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)

High-quality red light source

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)
- Adapter for 1,25 mm and POF available

	Type	Description
0.49100	**KE850**	EasyPoint red light source 650 nm, in a case, batteries and manual
1400070	**Fibre adapter**	Fibre adapter for 2,5 mm connection socket to 1,25 mm
1400078	**Fibre adapter**	Fibre adapter for 2,5 mm connection socket to auf POF

Ideal basic equipment for inspection tasks in optical networks

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 in optical TC and IT networks.

	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

More than just line tracers

KE301 – KE801

The cable finder kits consist of **EASYTEST** and **PROBE**. They enable technicians to contact-free find any cable types, wire or wire pairs in the shortest time without time-consuming insulation stripping. Errors such as interchanges, overdrafts, interruptions and other faults in cables are detected. The cable locators can be used for all cable types 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 telecommunications lines with up to 100 V voltage and numerous other functions make these devices the perfect tool for installation companies.

Have a look at our product video!

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

Product matrix cable and line tracers

EasyTest series

	KE301 Classic	KE401 IT	KE501 Electric	KE701 IT / Telephone	KE801 Fibre & Copper	KE2093 Line Tracer
Ideally suited for	**Telephone**	**IT / Telephone**	**Electric**	**IT / Telephone**	**IT / Telephone / Fibre**	**Elektro**
Transmitter with crocodile clips and RJ11	■	■	Crocodile	■	■	Crocodile
Signal feeding on active line 100 V	■	■	■	■	■	■
RJ45 plug with data port finder	–	■	–	■	■	–
Integrated laser light source (Class II) FO	–	–	–	–	■	–
F-socket for coax	–	–	–	–	■	–
Line tracing under 230 V mains voltage	–	–	–	–	–	■
Overvoltage protection	120 V	120 V	500 V	500 V	500 V	500 V AC / DC
Continuity test / Resistance measurement	■ / ■ LED	■ / ■ LED	■ / ■ LED	■ / ■ LED / Tone	■ / ■ LED / Tone	–
ISDN signal detection LED on receiver	–	■	–	■	■	–
LED flashlight function	■	■	■	■	■	–
Stable, impact-resistant ABS case	■	■	■	■	■	■
Quality – Made in Germany	■	■	■	■	■	EU

	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

Line Tracer – for active and passive electrical installations

EasyTest series

KE2093 Electric

The cable finder kit **KE2093** is a universal device for the search of cables under plaster, in floors and in the ground as well as for the search of individual conductors in a bundle. Fuses that belong to a specific 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 breaks and short circuits
- Detection of hidden sockets and localization of distribution boxes
- Determination of a single wire in a wire bundle
- Tracking of pipe installations and other conductive loops
- Localization of fuses and assignment 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 tracing system, set of transmitter and receiver, test leads and tips, carrying bag

High performance cable multimeter with auto tests

KE2500 is a telecommunications multimeter for troubleshooting in the telecommunications network. Service partner and network operator like to work with this specialised device.

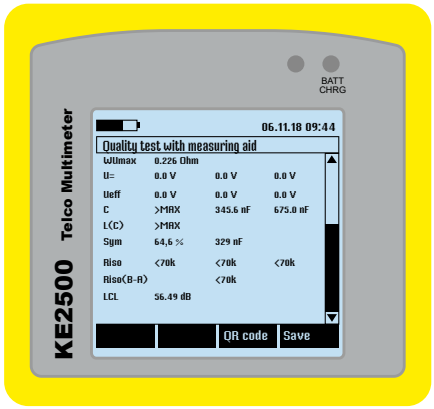
KE2500 cable multimeter enables users to realise detailed fault analysis and provides an overview of the physical status of the tested cable. The multifunctional and cost-effective test device is equipped with manual and automatable test sequences. The device comes with storage capabilities and a cable database containing numerous telecommunications lines.

KE2500 is ideal to be combined with the **KE905 Remote** line switch, which simplifies the measuring application and significantly shortens the measuring time. Measurement results can be displayed through QR codes to support digital order processing systems.

At a glance

- Voltage AC / DC incl. AC frequency
- Resistance and resistance symmetry
- Line resistance and loop resistance with high immunity to interferences
- Insulation 100 V / 8 V
- Capacitance and capacitance symmetry
- Ground return resistance
- LCL symmetry 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 editiable cable parameters
- Storage of measurements and data exchange via USB and QR code

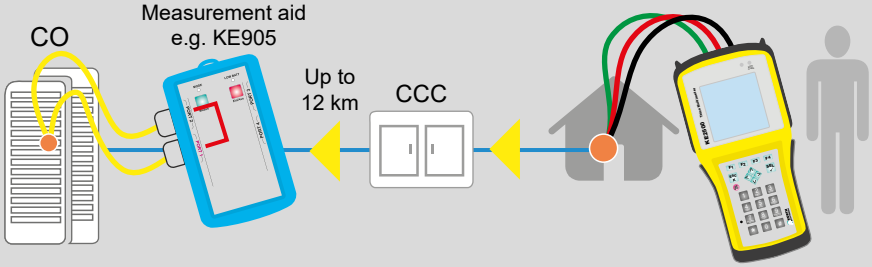
Transmission of measurement results via QR code



Extensive automated measurements

Have a look at our product video!

Examples of usage



	Type	Description
0.49250	**KE2500**	Telco Multimeter, fully insultated test cords with safety clamps CAT II 300 V, protective bag

2-in-1: Cable fault test and line qualification

KE3700 CT including cable multimeter function is used for DC and AC fault analysis. It includes resistance fault localization, a TDR function for cable fault location and measurements for line qualifications up to 31 MHz.

KE3700 CT enables the qualification of copper wire pairs. Predefined or manually editable filters are available for xDSL or telephony services within a frequency range up to 31 MHz.

To simplify the measuring tasks, users can chose between manual or automatable test sequences. Fully **automated** test sequences are possible in combination with the KE905 Remote electronic remote line switch, which is also included in the KE3700 CT package

Bluetooth, QR code and the supplied PC-software allow users flexible use in regard to documentation or data transmission.

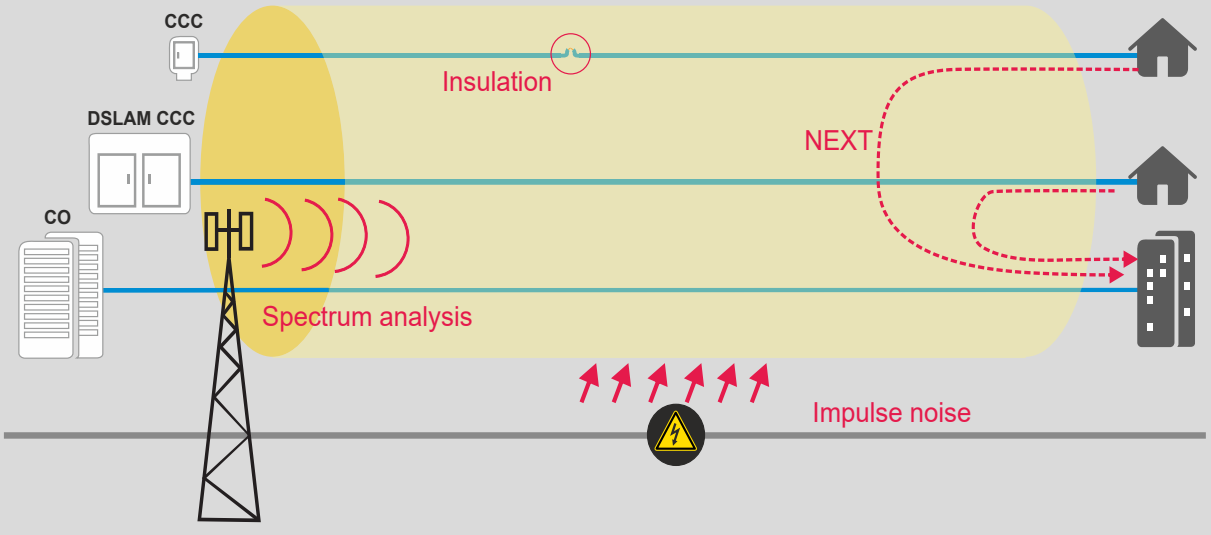
Have a look at our product video!

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
- Resistance and capacitance, symmetry
- 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 editiable 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

Ideal help to simplify cable fault measurement

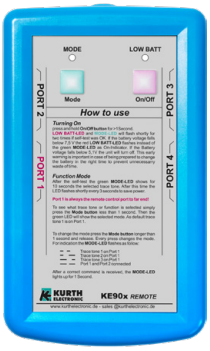
KE901 Line test assistant

The **KE901 Measurement Aid Set**, consisting of the electronic line switch **KE905** and the **KE910 controller,** is a real time and cost saving device when it comes to cable fault measurements or the simplification of tests in the line qualification of telecommunications pairs.

At a glance

- Set consisting of KE905 Remote and KE910 Controller
- Switching bridges and switching lines remotely
- 4 pairs of cables or 3 measuring devices can be connected
- Customer line 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

KE910 Controller



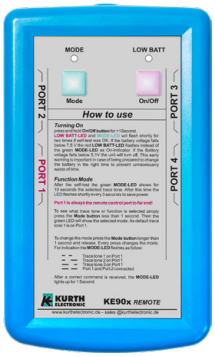
KE905 Remote

KE905 Remote

KE905 Remote is a remotly controllable line switch. Ideal in combination with KE's copper testing devices.

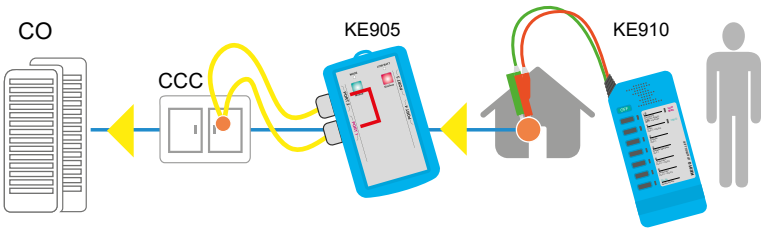
At a glance

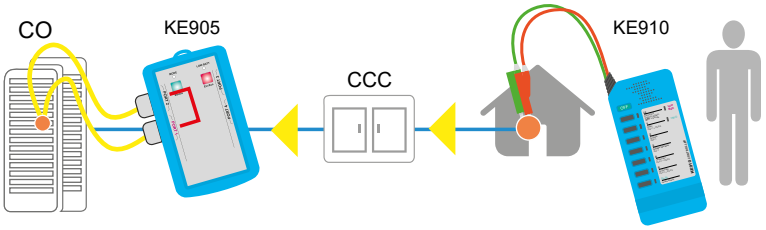
- KE905 Remote
- Compatible with KE3700 + KECT, KE3550 + KECT, KE3700 CT and KE2500, direct control commands to the KE905
- Switching bridges and switching lines remotely
- 4 pairs of cables or 3 measuring devices can be connected
- Customer line remains in service until measurement starts
- Remote switching up to 12 km possible
- No influence on the lines up to 31 MHz



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

Examples of usage





Have a look at our product video!

Universal measuring device for cable fault location

KE2100 is a compact and handy cable fault locator and is perfectly suited for locating faults in all types of cables with no service, such as twisted-pair cablings, telecommunications wire pairs as well as coax and electrical cables. The short dead zone and the long range of up to 15 km allow a versatile use of this handy TDR.

Multiple output impedances are available in an automatic setup. In conjuction with the velocity factor, specialists can meet all cable test requirements.

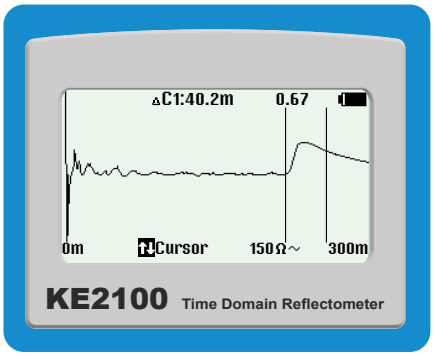
The integrated cable database also allows the addition and storage of additional cable types. During a test, on-screen-cursors help to measure distances between two events.

KE2100's freeze function makes it very easy to compare two measurements by overlaying their graphs, e.g. for "before-after-comparisons" or "reference-cable-against-cable-under-test-comparisons". The device has a high-resolution and easy to read display, wich also works with bright sunshine and enables users therefore to recognise and measure any small fault.

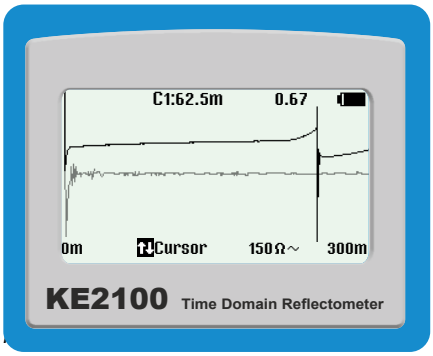
Measurement results can be stored in the device and transferred to a PC / laptop via Bluetooth. The supplied management software is used to manage the transferred measurement results and to create measurement protocols.

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



Two cursors facilitate the evaluation



„Frozen" measurement compared to a new measurement

Have a look at our product video!

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

Analogue test telephone

The handy, particularly robust and waterproof analogue test phone **TP09D** with a large graphic display is characterised by its straightforward design and its easy handling.

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

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

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

Cable conductor test set with voice connection

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

With CCTS-03 it is possible to quickly check newly laid or repaired cables for continuity, confusion, contact and earth fault. It always establishes a voice connection between the technicians. Due to the microprocessor-controlled adjustment, a clear distinction between the A- and B-wire is guaranteed even with switched, low impedance wire pairs e.g. ISDN, xDSL. It is no longer necessary to disconnect the line at the MDF and at the customer's site, which is effective and time-saving.

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

	Type	Description
0.49617	**CCTS-03**	Cable conductor test set CCTS-03, 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

Analogue test headset

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 phone lines in conjunction with either a second TalkSet or an analogue phone. Combined with a power source, voice communication can also be conducted via free, unpowered wire pairs.

At a glance

- For installation, commissioning and troubleshooting
- Disturbance-free in-house communication
- Cable testing
- High-impedance monitor

	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

	Typ		Artikelbezeichnung
Accessories KE3700 and KE3550			
0.49840-16	**Car charger plug**		Car charger plug 12 V 1,5 A
0.57451-02	**Protective glass, tempered**		Hardened scratch-resistant display protection (hardness 9H)
0.49620-10	**KE905 Remote**		Electronic line switch. Only usable in combination with the KECT option as well as KE3700 CT and KE2500. Control and execution of manual and automatic test procedures.
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
0.49840-19EU	**Power supply 12 V**		Power supply 220 / 110 V AC to 12 V, 2.0 A, EU version with interchangeable EU adapters (Not compatible with KE3600 / KE3500)
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
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
Accessories KE7000			
0.57485	**Adapter set RJ45-Koax**		Adapter set RJ45 to Coax, consisting of 2 pcs. of each Connector, RJ45 to BNC as well as BNC to F-Female
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
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

	Typ		Artikelbezeichnung
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
0.57407-0150	**Patch cable, short**		Patch cable RJ45, length 15 cm
0.57408-0500	**Patch cable**		Patch cable RJ45, length 50 cm
0.57890-1500	**Copper test lead**		High-quality, symmetrical test lead for copper tests, national 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
0.57930	**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

Accessories KE8000 – KE8200

Measuring cable SM
2 m, simplex

	Typ
0.57130	**SC / PC – SC / PC**
0.57131	**SC / PC – LC / PC**
0.57132	**SC / PC – ST / PC**
0.57133	**SC / PC – FC / PC**

Measuring cable MM
2 m, simplex

	Typ
0.57134	**SC / PC – SC / PC**
0.57135	**SC / PC – LC / PC**
0.57136	**SC / PC – ST / PC**
0.57137	**SC / PC – FC / PC**

Coupling
Fibre, simplex

	Typ
0.57138	**SC – SC (Plastic)**
0.57139	**LC – LC (Plastic)**
0.57128	**ST – ST (Metal)**
0.57127	**FC – FC (Metal)**

Plug-in adapters (also for KE801)
Fibre, metal

	Typ
1400070	**2,5 mm – 1,25 mm**
1400078	**2,5 mm – POF**

Protective bags and equipment cases

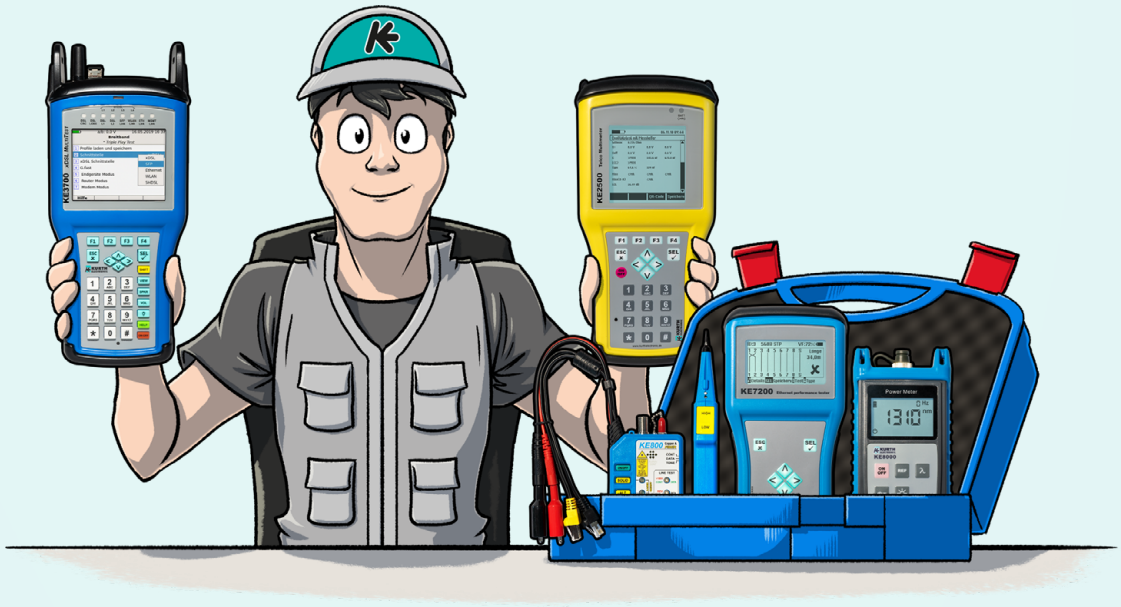
0.57613	**Protective bag**		Protective bag with device and cable compartment, suited for KE7100 and KE7200, including shoulder strap
0.57618	**Protective bag, small**		Protective bag with 1 equipment / cable compartment, small version, width x height x depth 30 cm x 14 cm x 16 cm
0.57620	**Protective bag, big**		Protective bag with 4 equipment / cable compartments, large design, width x height x depth 38 cm x 20 cm x 20 cm
0.57605	**Equipment case**		Equipment case blue with Kurth Electronic imprint, for storage of ***EasyTest***- (KE301-KE801), ***FlexiTest***- (KE7100 – KE7200) or ***FibreTest***- (KE8000 – KE8200) equipment. Including matching foam inlay (specify the inlay type when ordering). Dimensions 34 x 27,5 x 8,3 cm.
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 ***MultiTest***-, ***FlexiTest***- und ***FibreTest***-series. Dimensions 44.5 x 35.8 x 15.2 cm

Further information and additional accessories are available on request.

Your manufacturer for measuring and testing technology

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

- **MultiTest**: xDSL broadband testers
- **FlexiTest**: Network testers
- **FibreTest**: Fibre optic test solutions
- **EasyTest**: Cable and line tracers
- **CopperTest**: Cable fault meters
- **TelcoTest**: Cable conductor test sets and test telephones



KURTH ELECTRONIC

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