

KWS | ELECTRONIC TEST
EQUIPMENT GMBH

'19

Innovation protects investment

For over 50 years
Measurement solutions
at the highest level.



— **KWS:** Your partner for sophisticated measurement solutions.

Based on high-performance hardware, KWS offers test equipment for technicians who value long-term preservation and high security in their investment.

The demands placed on RF measurement technology in times of increasing digitalization are constantly increasing. You will need professional equipment, with which you are equipped for the tasks and technologies of tomorrow.

As a well-established provider of measurement technology solutions, we understand the challenges of the market—and more than meet them with expandable, adaptable and groundbreaking measuring instruments.

KWS offers sophisticated concepts and product lines for every user group and every technical problem.

What all our products have in common is the demand for quality, setting new standards in terms of innovation, precision and handling. With trend-setting technologies, high measuring accuracy and user-friendly handling we have been successfully implementing this claim for many years.

Put your trust in KWS' comprehensive know-how and many years of experience. And count on innovations that pay off.

— KWS Electronic has been developing and implementing solutions at the highest level for over 50 years.

Innovation protects investment: With KWS measuring instruments, you are always up to date: today, tomorrow and in future.

— Hardware meets Software: KWS and AND.

— Since the end of 2018, KWS is part of the AND Solution GmbH group of companies based in Munich.

AND has been the market leader for many years with the software solution of the same name for planning, documentation and operational support of the entire lifecycle in all kinds of access networks. Both companies offer solutions for the same areas of signal transmission: from installation companies to network operators.

Not only do the two partners complement each other perfectly, but the cooperation between the development departments can also open up completely new possibilities and product areas that were previously not part of the portfolio.

KWS is part of a network that offers solutions for every HFC network operator from a single source.

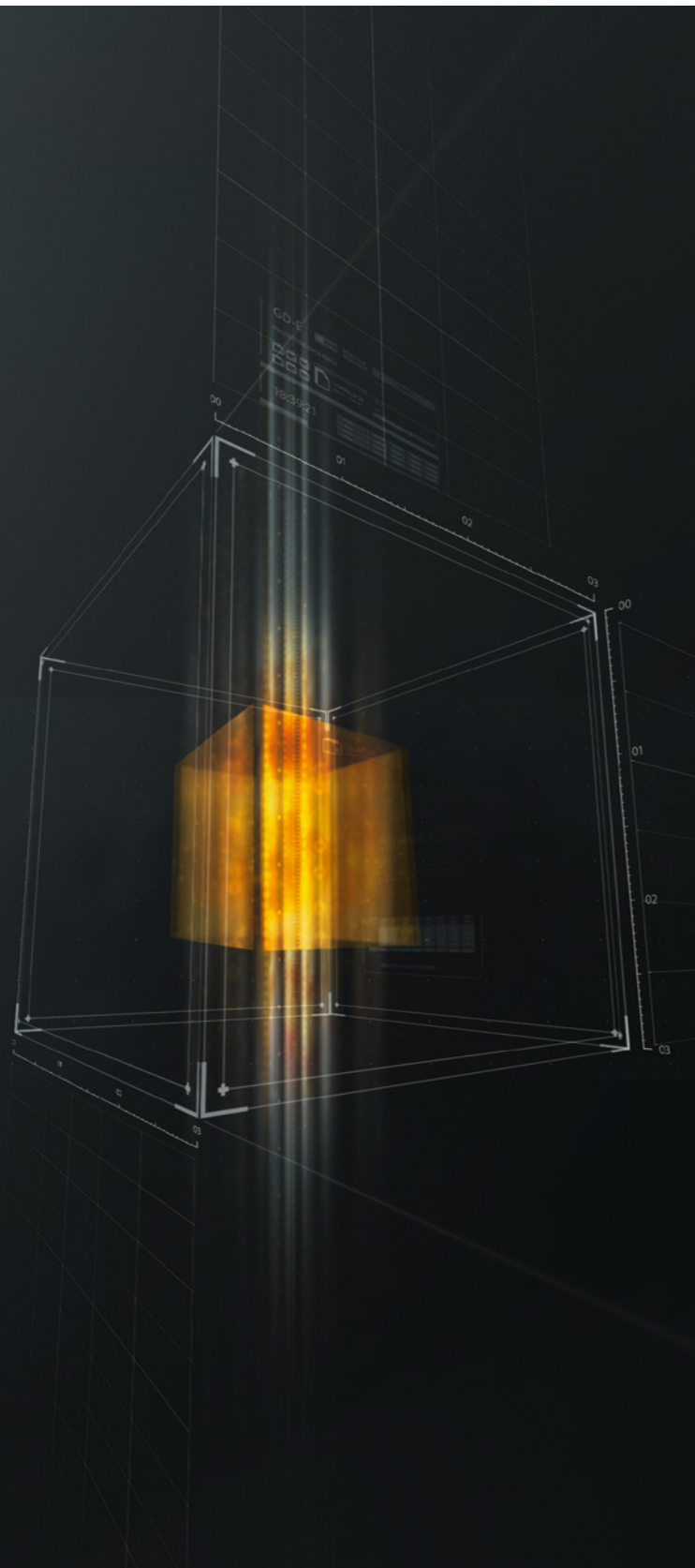
An example of this cooperation: The perfect interaction of KWS' network-capable measuring instruments and network documentation from AND allow previously unattainable efficiency in setting, checking and troubleshooting in every HFC network.

The direct comparison of target values and actual values at any measuring point helps to avoid errors and optimize network performance. The automated documentation of the measured values supports this and also minimizes the effort.

Another chapter in KWS' success story has thus begun. With many advantages for existing and future customers. Welcome to KWS!



KWS | GERMAN
ENGINEERING



— German Engineering: Technical excellence with tradition.

The term “German Engineering” stands worldwide as a seal of quality, identifying products of the highest standards and sustainable value.

At KWS, not only product development, but also manufacturing is strictly based on these proven principles of technical excellence. This makes KWS a reliable partner for everyone who values top quality.

For example, all soldering is lead-free and environmentally friendly, so that the components used achieve their maximum service life. The same applies to optical and electrical assembly testing: only 100 % tested modules are used for new equipment, but also for retrofitting and repairs.

All KWS measuring instruments are serviced and calibrated with high-precision calibration standards.

But our quality standards do not stop with the hardware: The operating concept of our test equipment portfolio, which has been tried and proven over many years, is constantly being further developed. And every customer can update the device software independently and, of course, free of charge.

The combination of these factors guarantees an extraordinary product quality, behind which we stand with our name.

At KWS, the highest quality is the standard: you can rely on our equipment. And you can rely on us as your partner for test and measurement technology.

—
Precise, reliable,
mature, tested...
Our measuring
instruments are
typically German.
—

— In cable networks, the future is coming faster and faster..

—
KWS has exactly
the measurement
technology solutions
that network oper-
ators and service
companies need.
—

In the past, cable network oper-
ators mostly supplied TV and
FM signals via technically quite
simple systems. In the last years
the requirements have risen
enormously.

Modern broadband networks
require the ability to compete
with telecommunications service
providers. Increasing bandwidth
requirements, Quality of Service
and DOCSIS 3.1 are some of the
decisive aspects here.

As complexity increases, the
amount of documentation is
constantly growing, and specific
workflows must always be
taken into account.

More colourful, faster, sharper—
more and more: Modern access
networks are the pulse of the
times. With KWS, you have this
flux under control.

The transition from coax to fiber
optic is establishing itself as a
permanent process—and existing
systems and networks must of
course continue to be mastered
with confidence and maintained
reliably.

Better and more intelligent
solutions in measurement tech-
nology are becoming more and
more important. And this is
exactly where KWS comes into
play—with our experience and
expertise, we are the right partner
for all network operators and
service companies.

You can rely on a company that
really knows the current chal-
lenges. And whose products are
not only state-of-the-art today,
but point to the future.

Installations of all kinds “around
the house” are your profession—
and the topics of satellite, CATV,
DTV, DAB+, return channel,
etc. are certainly no small part
of your responsibilities.

In the areas of network, reception
and distribution technology, the
tasks are becoming increasingly
complex and the technological
possibilities increasingly sophis-
ticated—such as optical signal
transmission. Electrical engineer-
ing has thus become electronic
technology.

It is not easy not to lose contact
here. Moreover, solid added value
can only be achieved with com-
petent solutions.

Not to mention the pressure of
time and costs. The right measur-
ing instrument for finding errors
and eliminating faults is the be-
all and end-all here.

At KWS, we understand the
problems you face and speak
your language.

— Professional work as easy as possible.

—
With a KWS test equipment,
you acquire a future-proof and
expandable platform.
—

This not only includes our con-
tinuous updates of the device
firmware, which you can down-
load easily and free of charge
and install yourself quickly. The
decisive factor is the flexibility of
the hardware.

Whether current developments
or new standards—our products
can be upgraded over many
years. This secures your invest-
ment and you can also measure
the current state of the art in
the future with the device you
are familiar with.

Trust is good, control is better:
with measuring instruments
from KWS, you are always on
the safe side.

—
The right technical
equipment makes all
the difference.
—

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AND



— **Service** is a top priority at KWS.

Take advantage of our service offers not only during the warranty period, but also afterwards. KWS service guarantees you a repair claim free of charge for all damages to the device caused by manufacturing defects within 24 months of purchase.

Even after this warranty has expired, we will provide you with inexpensive and quick repairs in our service center. We provide spare parts for at least eight years after delivery. And don't forget the possibility of retrofitting your measuring instrument!

It is even easier with a maintenance contract (see separate information), which offers you fixed cost and reliability. Your instrument will be maintained and serviced regularly so that it can solve every task for you with the highest measuring accuracy, just like on the first day.

For the time of repair or retrofitting, we can provide you with a rental unit—so that you can continue working.

Ask us for more information at any time, we are there for you.

Get in touch with us: be it with the online form for spare part enquiries on our website or with product advice from one of our competent contacts on the phone—we are your technical partner for sophisticated measurement solutions and precise signal analysis in data transmission.

— Even after purchasing a KWS device, you can count on us and our support. —

The purchase of a measuring instrument from KWS will be the beginning of a wonderful friendship—you can count on us.

— Get the best out of your KWS measuring instrument.

At KWS, we offer you first-hand training— from professionals for professionals.

It is very important to us that you actually exploit the technical capabilities of your KWS equipment. That's why we offer a wide range of training courses and seminars.

In addition to product launches at wholesalers and electric guilds, training courses for all types of equipment as well as CATV and technology seminars are part of our extensive range.

We always combine the imparting of theoretical knowledge with the application in daily practice. Benefit from the technical competence and the profound wealth of experience of our speakers.

Knowledge as a competitive advantage: We make you fit with know-how that pays off.

In our device-specific trainings, the participating technicians learn the basics for simple and uncomplicated problem solving on site. The operation of the measuring instruments and the interpretation of measured values are comprehensively explained. Fault simulations are used to simulate faults in a practical manner.

Topics such as the evaluation and use of constellation diagrams and NIT tables are also explained in this context.

Our technology seminars are aimed at users with appropriate prior knowledge and address topics such as DOCSIS, optical transmission or upstream measurements as well as theoretical basics of RF transmission and common modulation types.



You wish detailed information about products,
services and solutions?

KWS Electronic is at your disposal with competent
advice to the side. Call us or send us an email.

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