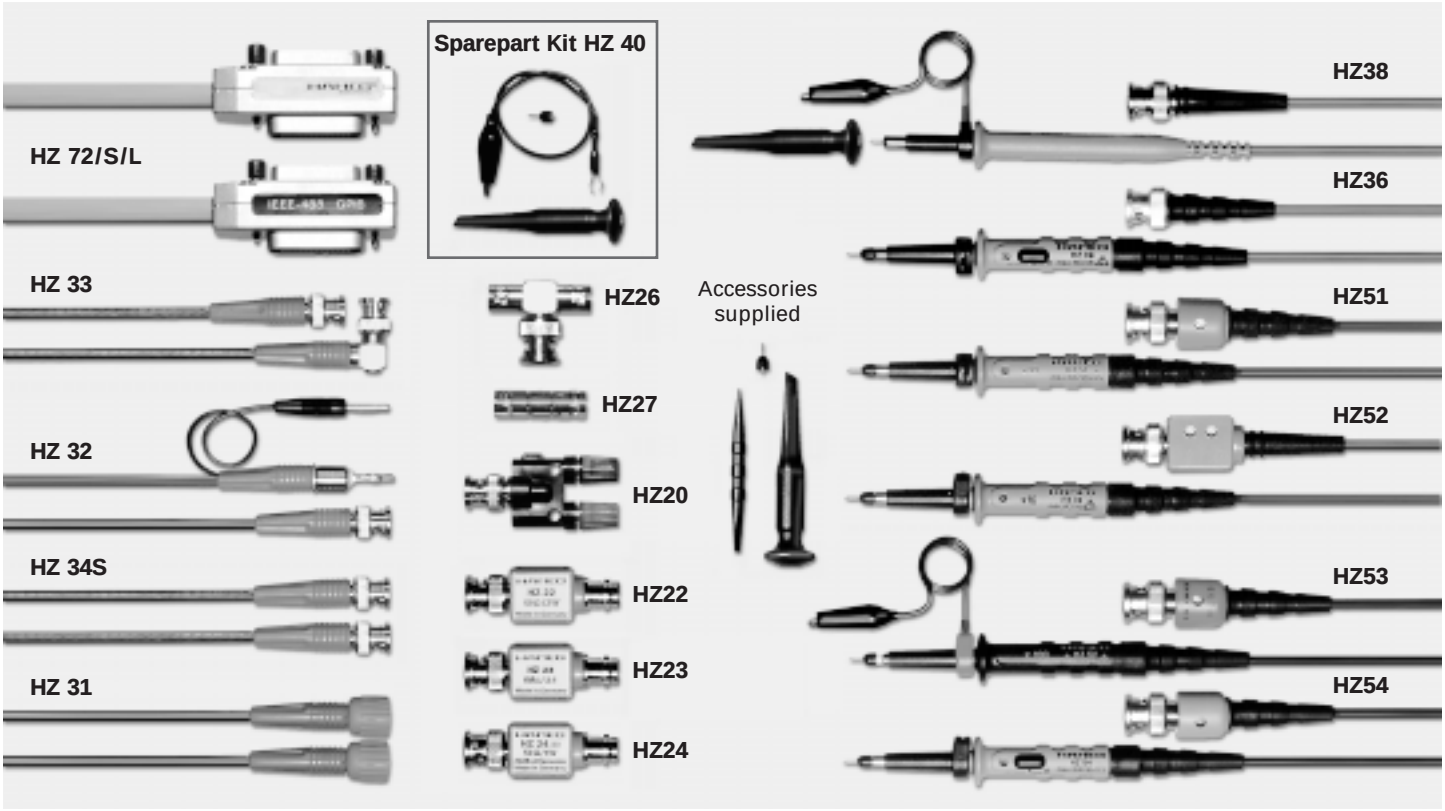
HZ 56 AC/DC Current Probe

Utilising Hall Effect technology to provide a broad frequency response, the probe will accurately measure AC, DC and complex waveforms. The compact clip-on design conforms to the IEC1010 safety standard and allows non-intrusive measurement of current from 5mA to 30A peak to an accuracy of ±1%. The probe gives a voltage output directly proportional to the measured current which is compatible with a wide range of measuring instruments.

Specifications:

Current range:	20A DC / 30A AC	**Frequency range:**	DC-100kHz
Accuracy:	± 1% ± 2mA	**Resolution:**	±1mA
Dielectric strength:	3.7kV, 50Hz, 1min.	**Load impedance:**	>100kΩ
Output sensitivity:	100mV/A	**Divers:**	BNC-cable, 2m.



HZ20	Adaptor BNC to 4mm binding posts
HZ22	50Ω BNC Feed-through termination 1GHz, 1W
HZ23	Attenuator 2:1, BNC male to BNC female, for oscilloscope service only.
HZ24	Set of 4 BNC 50Ω attenuators; 3/6/10/20dB; 1GHz, 1W, incl. 1x HZ22
HZ27	Adaptor BNC female to BNC female
HZ28	Adaptor BNC male to 2 BNC female

Test Cables

HZ31	Coaxial cable BNC/BNC, 50Ω, 40 inch, elbow
HZ32	Test cable BNC to single stacking banana plugs; 40 inch
HZ33	Coaxial cable BNC/BNC, 50Ω, 20 inch
HZ33S	Coaxial cable BNC/BNC, 50Ω, 20 inch, insulated
HZ34	Coaxial cable BNC/BNC, 50Ω, 40 inch
HZ34S	Coaxial cable BNC/BNC, 50Ω, 40 inch, insulated
HZ72S	IEEE-488-Bus-Cable, 40 inch. double shielded
HZ72L	IEEE-488-Bus-Cable, 60 inch, double shielded

Wide Band Probes with RF alignment

Type	Attenuation Ratio	Bandwidth	Risetime	Input Impedance	Max. Input Voltage
HZ36	1:1/10:1	10/100MHz	<35/3.5ns	1/10MΩII57/12pF	(10:1) 600V (DC+peak AC)
HZ51	10:1	150MHz	<2.4ns	10MΩII12pF	600V (DC+peak AC)
HZ52	10:1	250MHz	<1.4ns	10MΩII10pF	600V (DC+peak AC)
HZ53	100:1	100MHz	<3.5ns	100MΩII4.5pF	1200V (DC+peak AC)
HZ54	1:1/10:1	10/150MHz	<35/2.4ns	1/10MΩII57/12pF	(10:1) 600V (DC+peak AC)

Special Probes

HZ38	Demodulator Probe 0.1 - 500MHz	max. 200V (DC)

HZ47 Viewing Hood for Oscilloscopes HM205, 408, 604-1+2, 1005 and 1007

HZ97 Carrying Case for **HM303, 304, 305, 604-3, 1004** and **HM5005 / 6 / 10.**

The carrying case provides protection during transportation of an oscilloscope. It is made of a durable vinyl-coated material that is designed to withstand the stress and wear and tear of field use.

Subject to change without notice 05/99

Multifunction Interface HO79-6

Designed for HAMEG Analog/Digital Oscilloscopes with Serial Interface

The HO79-6 interface enables the user to transfer data from the oscilloscope to peripheral devices for documentation purposes and to transmit reference signals to the oscilloscope in its digital mode. Additionally the attached oscilloscope can be remotely controlled via the HO79-6 in its digital as well as in its analog operating mode.

HO79-6 supports:

GPIB (IEEE-488) – RS232C – Parallel (Centronics)

The HO79-6 processes commands (according to the SCPI standard) that will be received via the GPIB or the RS232C port. In its stand alone mode the HO79-6 is able to transmit data to an attached device after pressing the START button, for example to print a graphic document.

The following formats are supported for all ports:

PostScript - HPGL - PCL - EPSON

GPIB (IEEE-488) - bidirectional -

In this mode the adapter can be configured as normal **BUS** or as **TALK-ONLY DEVICE**.

The HO79-6 accepts commands from any GPIB controller and executes them. In this case the HO79-6 has to be configured as BUS DEVICE.

In its **TALK-ONLY** configuration the HO79-6 acts:

1. as transmitting device for listen-only instruments (for example: HPGL plotters)

2. as automatic controller when the oscilloscope is being operated in SINGLE mode. In case of a trigger event the oscilloscope digitizes the signal(s). Then the HO79-6 transfers the data as configured and resets the oscilloscope again.

RS 232C - bidirectional -

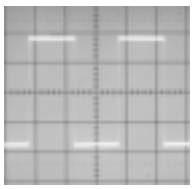
This port is used to transfer data and commands from/to the serial interface of a PC. The HO79-6 supports transfer rates from 1200 Bd to 38400 Bd.

Parallel - unidirectional -

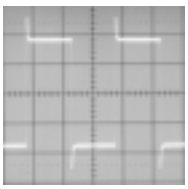
This port is used for printers with a Centronics type cable.

Attachment to the oscilloscope

When the HO79-6 is fastened to the back panel of the oscilloscope the connections for the data transfer as well as for the power supply will be built up automatically.



precise 1MHz signal from tester HZ60



1MHz signal with improperly adjusted probe

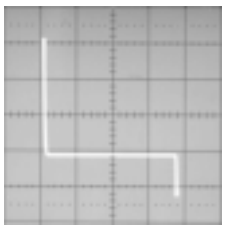
Scope Tester HZ60-3

The **HZ60-3** is currently the world's only reasonably priced instrument for accurate and reliable testing of the most important **characteristics of oscilloscopes** and **probes**. In view of the fact that many oscilloscopes actually have poor signal transfer characteristics, this tester is an indispensable piece of equipment. In addition, such an instrument is an absolute must for RF adjustment of high frequency probes or for matching probes to the oscilloscope input.

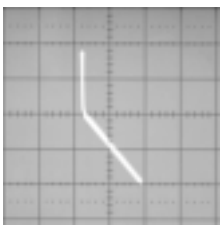
For all tests, the **HZ60-3** generates precise square-wave signals at **7 crystal-controlled frequencies** with a rise time of approx. **1ns**. This permits precise measurements of the horizontal deflection coefficients of oscilloscopes. The amplitude accuracy is better than **1%**, and can be recalibrated at any time using any DMM. To prevent power line interference, the Scope Tester is powered by 4 AA-type batteries, which are **automatically switched off** after three minutes.

7 crystal-controlled frequencies,
1-**10**-**100**Hz, **1**-**10**-**100**kHz and **1**MHz.
DC calibration voltage.
Rise time: typical <1ns.
3 output voltages: 25mV$_{pp}$ at 50Ω termination, 0.25V$_{pp}$ and 2.5V$_{pp}$ o.c.
Battery operated with 4x1.5V (AA) incl. 3 min. economizing circuit
Dimensions: 125x80x42mm.

Accessories supplied
Operating instructions, 50Ω-cable, 50Ω-through termination



Transistor junction base / emitter



parallel connection diode/resistor

Component Tester HZ65

The Component Tester **HZ65** permits **non-destructive** testing of semiconductors, resistors, capacitors, and inductors, either individually or in-circuit. The resulting display on the scope screen will show the **characteristic voltage/current diagram** of the component under test, enabling its functionality to be interpreted. Two **3-point sockets** are provided for testing transistors, permitting selection of any two contacts. Components with larger diameter leads and ICs are connected using **two test leads**. The test voltage and current are limited, so that no components can be damaged.

It is possible to rapidly **locate faults** in complex circuits by comparing test patterns of a known good circuit and the circuit under test. Before starting the test, all circuits must be disconnected from power to prevent passage of current through any components. It is also very important to disconnect **common ground**, because any additional connections between components and the tester may cause incorrect pattern display. Connects to all Oscilloscopes

Test voltage:	approx. 8.2V$_{rms}$
Test currents:	max. 3.7-37-320mA$_{rms}$
Power supply:	115V and 230V ±10%
Power consumption:	max. 4 Watt.
Dimensions:	125x80x42mm.

Subject to change without notice 05/96

Accessories supplied
Operating instructions,
2 test leads (red and black)