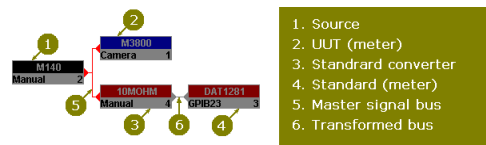


- Calibration procedure easy creation
- Automatic calibration of instruments
- Instruments control via RS232, IEEE488, VISA
- Calculated deviation and uncertainty in each point of test report
- Calibration uncertainty evaluated according to metrology standards
- Up to 20 instruments in one calibration point
- Windows 2000/XP/Vista/7/8 (32/64 bit)

The CALIBER program is intended for automatic calibrations of instruments by means of a standard. Except of the unit under test and the standard unit, a computer with Windows 2000/XP/Vista/7 operating system is being necessary.



## Remote control

The instruments can be either manually or automatically (by computer) operated. In automatic mode the interface RS232 or GPIB can be used, eventually any other interfaces (USB, Ethernet, RS485, ...) which utilize the industry VISA standard.

*National instruments GPIB interface is necessary for communication via IEEE488 interface.*

## Caliber output

Output of the CALIBER program represents a physically performed calibration with a calibration record – a table with measured and evaluated data (the test report).

Function	Range	Standard	UUT	Deviation	%spe	Allowed	Uncert.
VDC-2W	200 mV	20.0 mV	20.0 mV	-0 uV	0	200 uV	62 uV  ok
VDC-2W	200 mV	180.0 mV	180.6 mV	620 uV	62	1003 uV	71 uV  ok
VDC-2W	200 mV	-180.0 mV	-180.7 mV	-690 uV	-69	1003 uV	69 uV  ok
VDC-2W	2 V	0.200 V	0.200 V	-0.00 mV	0	2.00 mV	0.58 mV  ok
VDC-2W	2 V	1.800 V	1.807 V	7.00 mV	70	10.04 mV	0.58 mV  ok
VDC-2W	2 V	-1.800 V	-1.807 V	-6.80 mV	-68	10.03 mV	0.64 mV  ok
...							

## Calibration procedure

In Caliber program automatic calibration of UUTs is controlled through Calibration procedure. Calibration procedure is list of calibration points in that order, how they will be executed during calibration. Calibration procedure is different for different models of UUT. Calibration procedures for various UUT are created in CALIBER program too. For running, creating and editing of calibration procedures, program module "Procedures" is aimed. Calibration procedure can be created in program CALIBER only.

## Procedure wizard

Program module Wizard rules serves for convenient and easy new Calibration procedures creation. In general, "Instrument cards" determines action of the instruments which are connected to the calibration system. "Calibration procedures" define procedure of the calibration, point by point. All basic program modules are created in interactive way. Its generation doesn't require knowledge of programming.

## Instrument card

Instrument card contains description of the instruments including definition of functions, ranges, accuracy and mean of control or scanning displayed values as well. For creating and editing of instrument cards program module "Instrument card" is prepared.

## WinQbase-Caliber

Caliber can be used either independently or as a part of database software package WinQbase. Caliber program is specialized for automatic calibration of instruments. Standard delivery contains functions for electrical quantity meters calibration. New functions for non-electric quantities can be defined by user and appropriate calibration procedures can be generated.

## Caliber version 2.00 - new features

- 1. New remote interfaces (USB, Ethernet, ...)**

Instruments can be controlled using the standard VISA (Virtual Instrument Software Architecture) through different bus types (GPIB, RS232, Ethernet, USB, ...)..
- 2. Functions with more parameters**

Functions like power or impedance have more parameters. For example parameters of power function are voltage, current, frequency and phase. New version of Caliber software can calibrate also instruments with these functions.
- 3. Transducers calibration**

Transducers (power/frequency or phase/current) should be calibrated with using two standard instruments. One is used on input side of transducer and second on output side. New Caliber accepts more standard Unit in one calibration point.
- 4. Switch**

Switch is new type of instrument used in calibration procedure. It has not any influence to calibration results (it is not any standard, any UUT, either a source or a transducer). It can be used as an automated terminal switch etc.
- 5. Text comments in the protocol**

User can add text comments (additional information about measuring) into the test report.
- 6. Converters with non-linear conversion**

User can define converters with non-linear characteristic. This characteristic can be expressed by mathematic formula (temperature/resistance for platinum thermometer).
- 7. Selectable Rounding-off**

User can change the rounding method and expressions for particular values of the test report.
- 8. Up to 20 instruments in one calibration point**

There can be used up to 20 instruments in every calibration point. It is possible to use more sources, more standards and more converters. Standard value and specification can be composed from more standard instruments via Evaluation. There is also new Instrument scheme in Caliber program with interactive help.
- 9. Sequence of calibration points**

Sequence of calibration points in test report can be changed very easy.
- 10. Camera module**

There are new features in CamOcr camera reading module. For special cases can the user define fixed position of decimal point and fixed polarity of read value.
- 11. Measurement mode**

Measurement mode is a list of tasks being performed by the Caliber program during the calibration. The program has a defined measurement process to be used during the calibration. User can influence this process by adding and changing actions (adjustments, measurements, terminal switch on, terminal switch off) for particular instruments.
- 12. Evaluation**

Evaluation feature allows changing measured values, specifications and uncertainties of an UUT, a Standard and an Auxiliary standard directly using user Evaluation formula.