

CalEasy™

CALIBRATION AND VERIFICATION SOFTWARE FOR GEOTEST INSTRUMENTATION

- Supports automated calibration and verification of Geotest instrumentation
- Includes driver support for standards instrumentation required for verification and calibration
- Supports instrument driver interchangeability allowing replacement of the supplied standards drivers with any compatible standards instrument
- Supports creation of customized calibration certificates, and automatic generation of a calibration log
- Multiple operation modes supports verification only or combined verification / calibration



DESCRIPTION

CalEasy is a full-featured, Calibration Executive software package that supports the verification and calibration of Geotest instruments. The software is intended for use by users that prefer to perform in-house calibration and verification for their Geotest instruments. By calibrating or verifying the instrument in-house, the time and cost associated with returning an instrument to Geotest for calibration service can be eliminated or reduced.

CalEasy is also used internally by Geotest production to perform initial calibration and to recalibrate the instrument when received for service. This ensures that user and factory based calibration performance is similar. Depending on the specific instrument, standards instrumentation supported for calibration / verification includes a DMM and a frequency standards module. Some modules require the use of matrix switch card.

CalEasy's driver architecture supports the use of alternate standards instrumentation as well. New standards drivers can be developed using external development environments that support the creation of DLLs.

FEATURES

CalEasy uses instrument standards to perform calibration and calibration verification. CalEasy's instrument drivers are called Standards and are interchangeable - allowing the user to employ different instruments from different manufacturers. To provide interchangeability, CalEasy uses a DLL with a predefined instrument interface (functions/API) for each driver type. Each calibration program requires certain functions and capabilities to perform calibration and for each function, the user must supply a DLL that supports the required functional interface. If you choose

to use your own instrument, you can create a DLL driver for your standards instrument and configure CalEasy to use your driver. New drivers can be written using the ATEasy software development environment or with any other development environment including C/C++, Visual Basic, LabView or any other language that supports the creation of DLLs. CalEasy is supplied with samples for several instrument drivers created in ATEasy.

CalEasy supports several calibration run modes:

- **Verify only:** In this mode no calibration is done. The instrument is only verified to its original specification and the result is printed to a test log.
- **Verify and Calibrate if required:** In this mode verification is performed and if required (the verification task failed) the instrument is calibrated. If calibration is successful the instrument's non-volatile memory is modified with the new calibration values and a calibration certificate is generated. Alternately, if the verification is OK the instrument's non-volatile memory is modified with the new calibration date but no new calibration values are written to the instrument and a certificate is generated.
- **Calibrate Always:** In this mode no initial verification is performed. The calibration task is performed and the certificate is generated upon successful calibration

APPLICATIONS

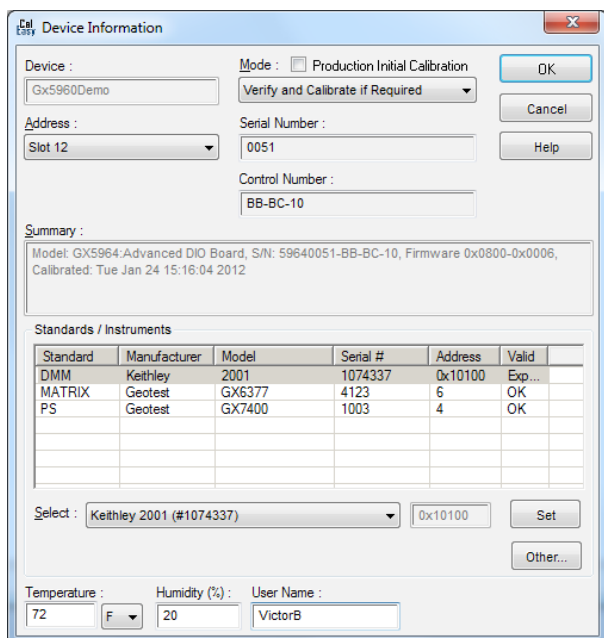
- Verification of Geotest instruments
- Re-calibration of Geotest instruments

CalEasy™

SPECIFICATIONS

CALEASY - VERIFICATION AND CALIBRATION EXECUTIVE SOFTWARE	
Compatibility	Windows 2000, XP, Vista, Windows 7 (32/64 bit) ATEasy run-time (v8 build 148a or newer)
Supported Calibration of Geotest Instrumentation	GX5055; 6U PXI, 32 channel digital instrument GX5295; 3U PXI, 32 channel digital instrument GX5961/GX5964; 6U PXI, 32 & 16 channel instruments
Test Modes	Verify Only, Verify and Calibrate if Required, Calibrate Only
Verification Log Data File Formats	Text and HTML
License	Single machine software license

SETUP AND CONFIGURATION



CalEasy Device Information

Device : Gx5960Demo

Mode : ☐ Production Initial Calibration
☒ Verify and Calibrate if Required

Address : Slot 12

Serial Number : 0051

Control Number : BB-BC-10

Summary :

Model: GX5964-Advanced DIO Board, S/N: 59640051-BB-BC-10, Firmware 0x0800-0x0006, Calibrated: Tue Jan 24 15:16:04 2012

Standards / Instruments

Standard	Manufacturer	Model	Serial #	Address	Valid
DMM	Keithley	2001	1074337	0x10100	Exp...
MATRIX	Geotest	GX6377	4123	6	OK
PS	Geotest	GX7400	1003	4	OK

Select : Keithley 2001 (#1074337) 0x10100

Temperature : 72 F Humidity (%) : 20 User Name : VictorB

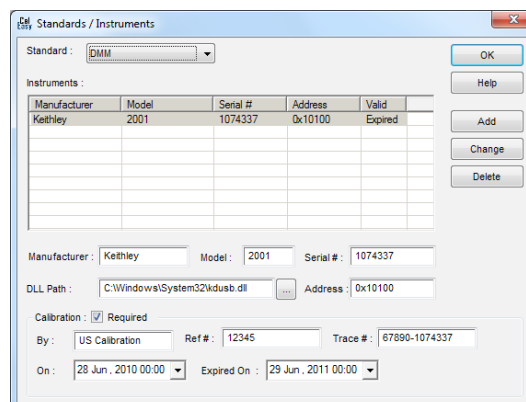
When CalEasy is started, the user selects the device for calibration, the run mode, and the standards instrument required for the calibration or verification program.

ORDERING INFORMATION

CalEasy	CalEasy License for all Supported Geotest Products (Single User License)
CalEasy-GX5055	CalEasy for the GX5055 (Single User License)
CalEasy-GX5295	CalEasy for the GX5295 (Single User License)
CalEasy-GX5960	CalEasy for the GX5960 (Single User License)
CalEasy-UG	Upgrades a Single Instrument CalEasy License to Include All Supported Geotest Instruments

Note: Specifications are subject to change without notice.

STANDARDS SETUP



Standards / Instruments

Standard : DMM

Instruments :

Manufacturer	Model	Serial #	Address	Valid
Keithley	2001	1074337	0x10100	Expired

Manufacturer : Keithley Model : 2001 Serial # : 1074337

DLL Path : C:\Windows\System32\kdsusb.dll Address : 0x10100

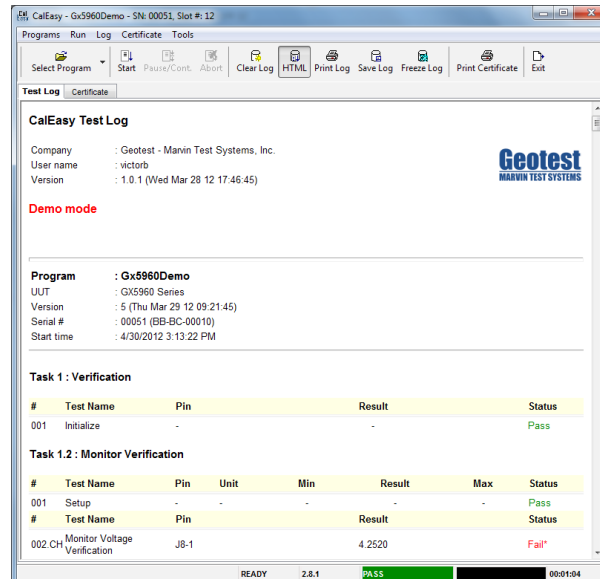
Calibration : ☒ Required

By : US Calibration Ref # : 12345 Trace # : 67890-1074337

On : 28 Jun, 2010 00:00 Expired On : 29 Jun, 2011 00:00

Each instrument standard is recorded by CalEasy, providing traceability of the standards instruments.

CALEASY TEST LOG



CalEasy - Gx5960Demo - SN: 00051, Slot #: 12

Programs Run Log Certificate Tools

Select Program Start Pause/Cont. Abort Clear Log HTML Print Log Save Log Freeze Log Print Certificate Exit

Test Log Certificate

CalEasy Test Log

Company : Geotest - Marvin Test Systems, Inc.
User name : victorb
Version : 1.0.1 (Wed Mar 28 17:46:45)

Demo mode

Program : Gx5960Demo
UIJT : GX5960 Series
Version : 5 (Thu Mar 29 12 09:21:45)
Serial # : 00051 (BB-BC-00010)
Start time : 4/30/2012 3:13:22 PM

Task 1 : Verification

#	Test Name	Pin	Result	Status
001	Initialize	-	-	Pass

Task 1.2 : Monitor Verification

#	Test Name	Pin	Unit	Min	Result	Max	Status
001	Setup	-	-	-	-	-	Pass
#	Test Name	Pin	Result	Status			
002	CH Monitor Voltage Verification	J8-1	4.2520	Fail*			

READY 2.8.1 PASS 000104

While verification or calibration is running, CalEasy displays a test log that can be automatically saved or printed.