HELIOS® Primary Interface Software

Built on the Integral® API Foundation with a LabVIEW™ User Interface

HELIOSense Software is the primary interface for HELIOS components and systems. It is a flexible architecture where any hardware built into the Labsphere API (LSAPI) can be recognized and used in HELIOS systems.

Software Features

• “State” functions that can be set up for system configurations, saved and re-accessed or password protected
• Scripting functions for simple programs inside and outside HELIOSense GUI
• TCP enabled scripting and communication functions
• Hunt & Seek functions using attenuators, detectors and spectrometers
• Continuous real-time asynchronous data logging with time stamps on all data parameters
• “Infinite” scrolling Display & Data session logging
  – Access to control settings and measured parameters
• SQLite database with export functions
• Calibration data interface for loading characterization files
• User-definable non-linear detector response tables for external Devices Under Test (DUTs)
HELIOSense LOCAL and REMOTE Interfaces for D, A, L, V & S System Families

- LOCAL System Interface Options
  - Cube computer embedded in system rack for turn-key system performance
    (customer provides keyboard, video and mouse)
  - Installation of HELIOSense on any customer computer with single USB connection for system control

- REMOTE System Control Options
  - Networked HELIOSense software installation (Ethernet) using API Over-The-Wire Architecture
  - TCP scripting interface via Ethernet

HELIOSense SDK

Engineering and software access based on the LSAPI infrastructure, the Software Development Kit (SDK) for HELIOSense opens programming and control in the following languages

- Engineering-friendly LabVIEW Instrument Driver and code access

- Software interface and code access for languages listed below
  - C and C++
  - C# and .NET
  - MATLAB® Toolbox
  - Programming documentation and Example Code provided for all language types

- Customer has to have an existing IDE for the chosen language/environment

- Requires existing HELIOSense Software installation

- Customer needs to supply their own PC with the installed IDE