



PORTABLE RADIATION MEASUREMENT

CSP-PL™

Programming Library



CSP Family

FEATURES

- Provides library of executable functions to communicate with CSP™ probes and CSP-COM™ modules
- Allows CSP probes measurements acquisition on a PC
- Allows CSP probes communication with third party software
- Can connect multiple probes to a PC
- Can connect remote probes to a PC with CSP-COM range
- Backwards compatible with all CSP probes

DESCRIPTION

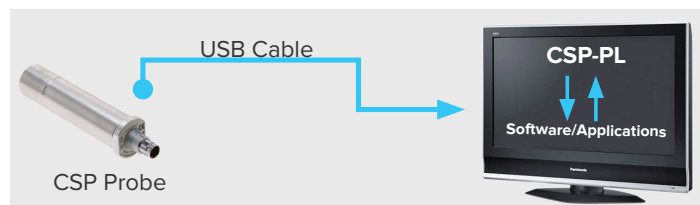
With CSP-PL Programming Library, CSP probes can be connected directly to a PC without the need for a survey meter. Measurements can be directly acquired, stored and displayed in any way that the computer allows. A PC can then act as a survey meter or a scaler/timer or as any instrument based on CSP probes with the appropriate software development.

CSP-PL library provides direct call to function and allows acquisition of the CSP probe measurements on a PC without the need to understand the CSP protocol running all CSP instruments. By combining CSP-PL library with CSP-COM modules, one can connect multiple local probes and/or remote probes to build specific systems and cover applications such as remote monitoring based on combination of different CSP probes covering either dose or contamination.

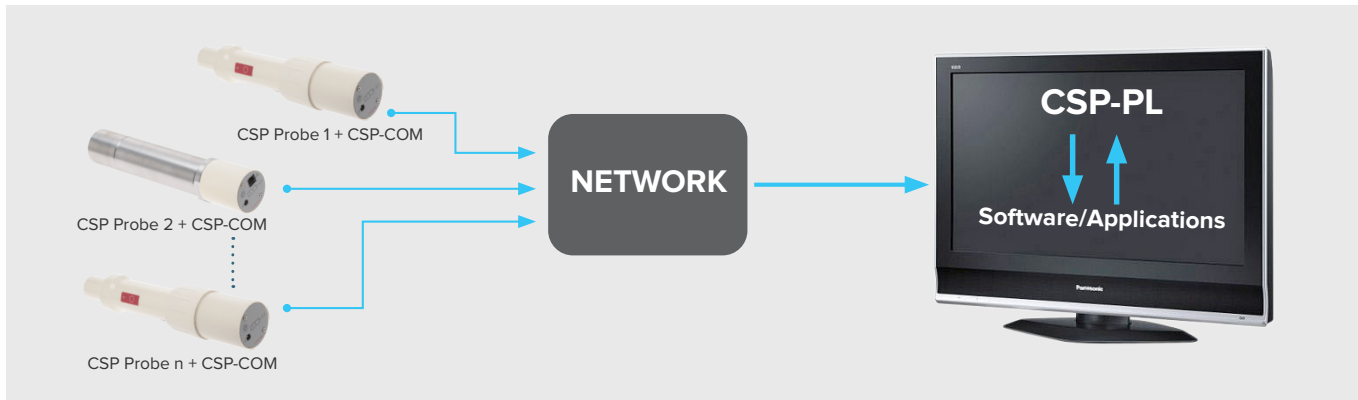
This programming library supports the third party software with periodical measurement updates after key parameters have been set before starting acquisition. These parameters are:

- Choice of unit (i.e: c/s, CPM, DPM, Bq, etc...) to display, selection made within the list stored in the probe memory.
- Enabling or disabling the integrated smoothing algorithm for dose-rate measurement, thus complying with IEC standards.
- Selection of Alert and Alarm set-points (from probe memory list or directly defined by the software). The software can either control alarm/alert decisions itself or leave this task to CSP-PL library.
- Selection of periodical measurement update in CSP-PL library (range from 250 ms up to days).

The host software does not need to pull each probe read-out because CSP-PL library makes each measurement update available for it in computer memory stack, thus leaving only the main display management to the main software.



CSP probe linked directly to PC via USB with software using CSP-PL library.



CSP probes with CSP-COM module linked to a PC with software using CSP-PL library.

CSP-PL library also automatically manages CSP-COM interface, that is:

- Scanning and discovery
- Hand-shake
- Periodical communication
- Communication lost and re-connection

To prevent compromising probe measurement accuracy, the CSP-PL library does not allow the user to write probe operating parameters or to write calibration parameters.

SPECIFICATIONS

Compatible Operating System (non exhaustive)

- Windows XP (SP1 and SP2), Windows Seven, Windows XP embedded.

Development Language Compatibility (non exhaustive)

- C++.
- Microsoft .NET compatible (C#, Visual Basic .NET)
- Two examples are provided with CSP-PL library, in source code format and executable for C++ and C# .NET

Recommended PC Configuration

- Latest available processor
- RAM 2 GB minimum

Future Versions

- Each new CSP probe is managed by a dedicated software plug-in preventing entire new installation of CSP-PL library.
- All new plug-ins are available on the Mirion website with password protected access.
- CSP protocol evolution will be transparent for the application software based on CSP-PL library. New versions of CSP-PL library will be backward compatible with initial version.
- CSP-PL library upgrade will be available on the Mirion website.

Programming Support

- Mirion can support you during your program development with dedicated support package via phone and e-mail assistance.

ORDERING INFORMATION

- CSP-PL Library: NOM006406 (EM89696)
- DS-STARTER-20: 20 hours of remote support: EM90854
- DS-ADVANCED-50: 50 hours of remote support: EM90855
- CSP Probe/PC USB Cable: NOM006288 (EM78466)
- CSP-COM Bluetooth®: NOM006313 (EM82481)
- CSP-COM Wi-Fi: NOM006332 (EM83437)
- CSP-COM RS-485: EM83438
- CSP-COM Ethernet: NOM006333 (EM83442)
- CSP-COM Ethernet without backup battery: NOM006411 (EM90284)
- CSP-COM RF 868: EM83440
- CSP-COM RF 915: EM83441
- CSP-COM RF Supervisor-Repeater 868: EM86288
- CSP-COM RF Supervisor-Repeater 915: EM86289

