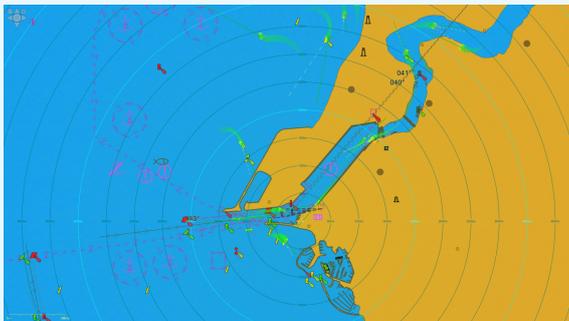
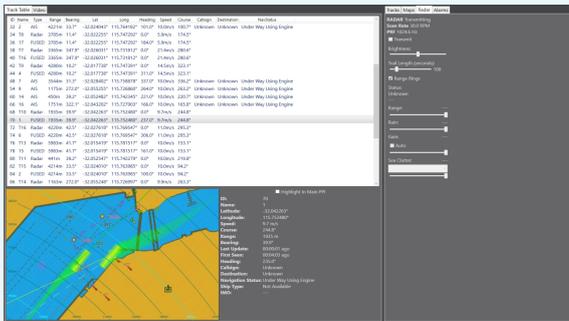


## Surveillance Display Framework (SDF)



SDF Main Window



SDF Secondary Window

### Features:

- Fully customisable, multi-sensor GUI application
- Includes source code of example application with PPI radar display & TV video window
- Multi-window/multi-screen display
- Quick-start route for UI development
- Suited to fixed platforms (i.e. shore-based or ground-based systems)
- Supports background maps (or charts) & overlaid track symbology
- Detailed "Track Table" functionality included in example application
- Developed with .NET (Core or Framework environment) & C#
- 12 months of software updates & engineering support

Cambridge Pixel's Surveillance Display Framework (SDF) offers a quick-start route either for the development of next generation command and control (C2) user interfaces or for the modernisation of legacy systems. SDF is supplied as a complete development package that includes source code for an off-the-shelf, fully customisable, multi-sensor GUI/command and control (C2) application.

SDF is designed to support systems integrators and surveillance solution providers with the development of user interfaces for:

- Land-based coastal surveillance systems
- Offshore wind farm monitoring systems
- Military range safety display systems
- Integrated port security systems
- Mobile/deployable coastal security systems

Whereas Cambridge Pixel's Maritime Display Framework (MDF) product is designed for single-screen, moving platform systems deployed on board ships and vessels, SDF supports multi-screen systems which are either shore-based or ground-based (or on any stationary fixed platform).

### SDF Example Application

As supplied, the SDF example application runs as two full-screen windows, each designed to be displayed on a separate monitor. The main window is a plan position indicator (PPI) radar display consisting of a background map (or chart) overlaid with primary radar video and various sources of tracked target data. Mouse interaction is supported, including track selection, as well as panning and zooming of the view.

The secondary window comprises two panes. The "Track Table/Video" pane is switchable between a detailed radar track table and a camera video picture. When "Track Table" is selected, a tabulated list of all tracks is displayed alongside a more detailed list of track parameters for the currently selected track. When "Video" is selected, live camera video is displayed in the pane, with overlaid on-screen controls for pan, tilt and zoom. The "General Settings" pane includes a variety of example user interface elements.

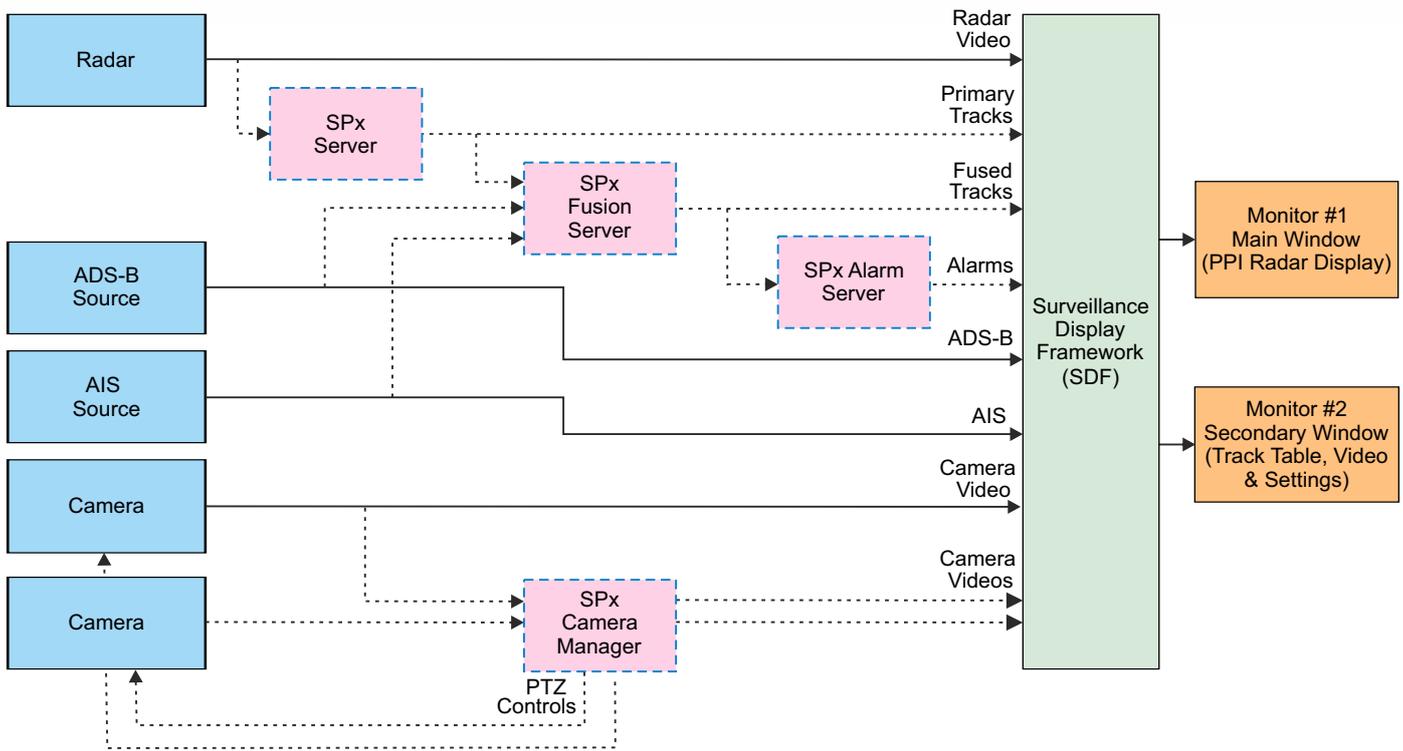
### .NET & C#

Developed in C#, the SDF development package includes a Visual Studio project that can be used to build the SDF application for the .NET environment. Graphical elements have been implemented using Windows Presentation Foundation (WPF).

### Systems Integrators

SDF can be leveraged by systems integrators to support technology refresh and capability enhancement programmes, where a new user interface is required that is backwards-compatible with existing legacy sensor systems.

# DATASHEET



By using the sensor processing and display functions in Cambridge Pixel’s SPx Development Library (included with the SDF development package), support can be incorporated for a wide variety of surface, ground and air domain sensors. Sensor types such as radar, daylight camera and thermal imager are supported, as well as data streams from ADS-B and AIS receivers.

## Optional Software Modules

In addition to the functions in the SPx Development Library, a number of optional software applications are available for use with SDF, including applications for plot extraction and tracking (SPx Server), track correlation (SPx Fusion Server), alarm management (SPx Alarm Server) and arbitration/slew-to-cue control of multiple PTZ cameras (SPx Camera Manager). To aid with development, a time-limited 12-month licence for SPx Server is included as part of the SDF development package.

## Licensing, Support & Training

A development licence is provided as part of the SDF development package which, once built in Visual Studio, allows the SDF application to be executed and tested.

The package includes 12 months of software updates and engineering support via email, telephone and/or remote access software (e.g. TeamViewer).

Once software development is complete, each deployed instance of the application will require separate runtime licences. Both the development and runtime licences can take the form of either a USB dongle or a MAC address locked licence file.

## System Requirements

- Operating System:** Windows 10 or 11
- Visual Studio Version:** 2015 and onwards for .NET Framework  
2019 and onwards for .NET Core or .NET 6 and onwards
- .NET Runtime Version:** At least .NET 6 or v4.6 of .NET Framework or v3.1 of .NET Core for legacy environments

## Ordering Information

- 500-510 SDF Dev Package - Dev Licence
- 500-520 SDF Customised Application - Runtime Licence

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