

PC Radar Processor (PC-RP™)

High performance, PC based radar processing

This high performance, PC based, radar processing unit is designed, developed and manufactured by SSR Engineering. It uses COTS (Commercial Off-the-shelf) components and interfaces with most existing and legacy radars.

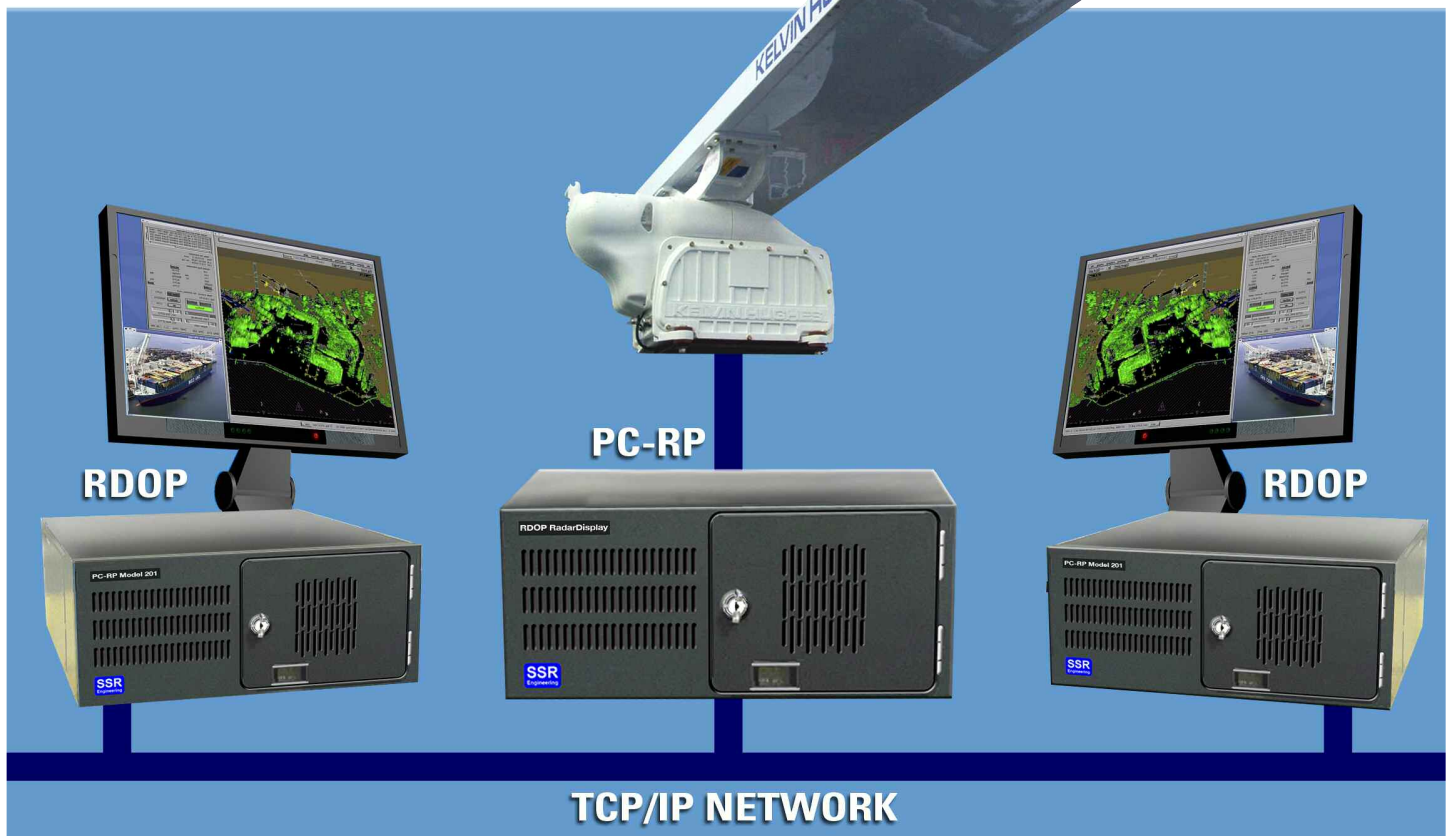
The PC-RP™ Operates on a standard network, with advanced signal processing, tracking and image generation capabilities. networked

A stand-alone PC-RP™ can deliver real time radar image and track data to remote display stations, or multiple PC-RP™ can be networked to provide a composite picture of large surveillance areas.

Wide Range of Radar Applications

The PC-RP™ is a key element for a wide range of applications, including Port Security, Range Safety, Coastal Surveillance, Ship Navigation, or Vessel Traffic System (VTS), as well as Surface Search and Air Search Radar Systems.

- Remote Display and Control via a Standard TCP/IP Network
- Open System Architecture
- Interfaces with Most Existing and Legacy Radars
- Simplified Radar Control
- COTS (Commercial Off-the-shelf) Hardware
- Real Time Radar Processor
- Automatic Gain and Clutter Controls
- Allows Remote Display and Control via TCP/IP Network
- Land Based and Shipboard Applications
- Air Search and IFF Applications
- Commercial Off The Shelf (COTS) Hardware
- Integrated with AIS, Cameras, and other Sensors
- High Performance Tracker
- Low Cost
- Easy to Use
- Scalable Design
- Analysis Tools



Baybridge provides the technology as well as the design and build skills to strengthen coastline surveillance, making it possible to watch large stretches of coastline with minimal effort and cost.

Central command post observation and control centres operate using a network of multiple remote radar installations. Each networked remote radar site has PC based Radar Processors (PC-RP) which controls the Radar Transceiver and the Radar's AIS output data via a TCP/IP network port.

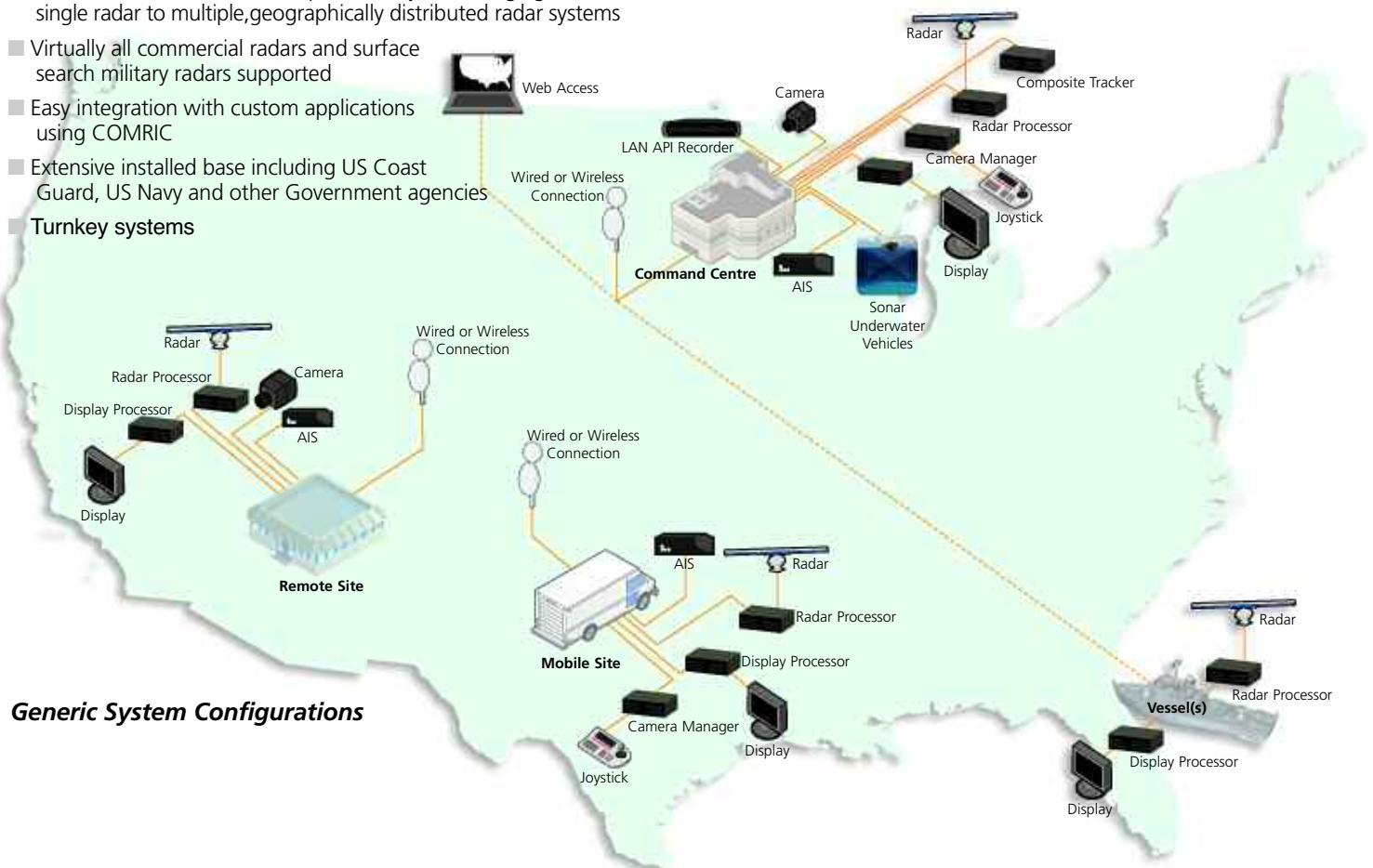
Remote high resolution video, using live-camera feeds controlled by a Camera Manager and video encoders can be used to augment the Radar information. This combination of video and radar data is transmitted via a landline or wireless data connections.

- High-performance software and COTS hardware for automated radar and video camera tracking
- Standard TCP/IP network based operation for remote display and control
- Radar integration with other devices such as AIS and SONAR
- Cost-effective, flexible, and expandable systems ranging from a single radar to multiple, geographically distributed radar systems
- Virtually all commercial radars and surface search military radars supported
- Easy integration with custom applications using COMRIC
- Extensive installed base including US Coast Guard, US Navy and other Government agencies
- Turnkey systems

Seamless coverage of entire coastlines is achieved through the use of multiple radar sensors and composite tracking. Radar targets are tracked from one radar zone to the next along any section of coastline covered.

Multiple Remote Display Operators Positions can be used if required. Each of the Command Centre's multiple RDOP units can be fed the overall radar image, permitting individual operators to zoom in so as to assess and evaluate areas of interest.

Wider coast coverage is possible with the networking of multiple Command Centres. These can be linked to Headquarters with tiered, secure TCP/IP links. RDOP units at HQ can zoom into any area. This could include a section of coastline, a single vessel incident or wide area coverage. A ship's AIS (Automatic Identification System) data, which can also be linked to the radar track, giving the vessels name, its position and other information related to the vessel.



Generic System Configurations