

► Tracker Radar Console

The Tracker Radar Console (TRC) provides a sophisticated, graphically-orientated, human-machine interface for optronic and radar trackers such as the RTS 6400 Optronics Radar Tracker (ORT). The system simultaneously displays tracking video from several ORT sensors and overlays high-resolution graphics and symbology to facilitate searching for and tracking of targets by the operator, as well as weapons firing.

In addition, the TRC allows the user to configure, calibrate and control the Tracker Radar using a combination of handgrip, rollerball, fast function keys and on-screen menus.

Features

The features of TRC are as follows :

- Display of primary video input sensor on primary display
- Display of three available video sensors on secondary display
- Display of X-Band synthetic radar data
- A/R Trace
- Display of target tracking information
- Auto and Manual Designation modes
- Air and Surface modes
- Positioner control in manual mode
- Operator controls and setup for radar parameters
- Range gate position control
- Laser Range Finder (LRF) control
- Weapons status monitoring
- Weapons firing control
- Bombardment support
- Shell Splash Spotting correction
- High-resolution flat-panel displays
- High-speed synthetic graphics
- Networked display system
- On-line health monitoring
- Built-in self-tests



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Design

A standardised Versatile Modular Console (VMC) designed for the SA Navy is used for the TRC. The TRC Computer Software Configuration Item (CSCI) was developed by C²I² Systems. The software was designed using the latest in Object-Orientated Design (OOD) methodologies and implemented using an Object-Orientated Programming (OOP) language, C++. The host operating system is Windows NT Embedded V4, which provides high-speed graphics and fail-safe operation.

The computing segment of the TRC uses an embedded VME platform, with VME Pentium processor cards. The TRC interfaces to the Tracker Radar, as well as to other sub-systems, using an FDDI local area network, employing the real-time transport protocol XTP.



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Graphics

Graphics symbologies are displayed on the TRC with a 20 ms update rate. This provides for very responsive operator interaction.

Applications

- Naval Tracking Radar Displays
- Air Defence Tracking Radar Displays

Specifications	
Height	1 600 mm
Width	670 mm
Depth	600 mm
Desk Depth	600 mm
Display	2 x 20" flat-panel displays
Resolution	1 280 x 1 024 pixels
Colour	256
Processors	2 x Pentium 600 MHz
Networking	1 x 100 Mbps FDDI PMC Adapter
HMI Controls	1 x handgrip 1 x trackball 27 x desk keys 1 x 16-way numeric keys 1 x 4-way cursor keys 2 x 6 x 4-way soft GDU keys
Video Input	5 x CCIR PAL inputs
Temperature	0 C - 70 C
IP Rating	IP53 (except for rollerball)