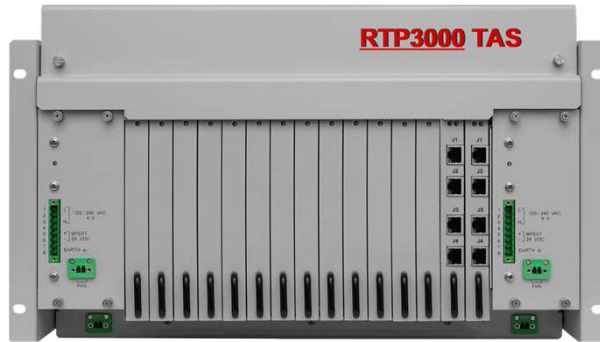


# User Identified Benefits



IEC61508-2010  
SIL 1-3  
IEC61131-6



Quality First

## IEC61508 rev2 (2010) SIL-3

### Mean Time to Fail (MTTF) > 50,000 Years:

- **No single point of failure:** Failure of any single component will not affect the correct operation of the RTP3000-TAS system.
- **Highest availability:** A RTP3000-TAS has a Mean Time to Fail Spurious (MTTFS) of greater than 60,000 years using the failure rates defined in the IEC 61508 2010 Standard.
- **Transparent quadruplet:** The RTP3000 is four physically separated, parallel control systems integrated into one control node. Three out of four (3oo4D) voting provides high integrity, error-free, uninterrupted process operation
- **Comprehensive diagnostics:** The ability to provide complete on-line diagnostic coverage. The RTP3000-TAS provides this capability without additional hardware or special programming.
- **Online repair:** The RTP3000-TAS is designed for continuous operation, providing on-line replacement of modules without system or process interruption.
- **Lowest MTTR:** Online replacement (Hot Swappable) and extensive built-in diagnostics which automatically pinpoint faults to field replaceable modules allows return to operation to be accomplished quickly without process interruption.

### Highest Integrity and Performance:

- **Highest performance:** The RTP3000-TAS provides processing power capable of solving in excess of 50 PID control loops every 1 Msec including scanning of I/O, logic solving, alarm handling, as well as peer-to peer and other communication functions.
- **Highest integrity:** With its QMR architecture and high diagnostic coverage, the RTP3000-TAS system achieves reliability (the system functions correctly, in excess of 99.9999% (6NINES)).
- **SOE and Alarm Time Stamp:** All input cards process SOE (both Digital and Analog) as well as Alarms and time stamp them to 1 Msec.

### Unique “Cost-effective” Pricing Model:

#### Hardware pricing – TMR List Price <\$30,000:

- **Consists of the following components.**
  - 3-Node Processors, 3-Power Supplies, 3-Chassis
  - 64 (192) – Triple Redundant Digital Inputs, 6 cards
  - 64 (192) - Triple Redundant Digital Outputs, 6 cards
  - 96 (288) - Triple Redundant Analog Inputs, 9 cards
  - 16 (48) - Triple Redundant Analog Outputs, 3 cards
  - 8 (24) Triple Pulse Input Channels, 3 cards
- **Design flexibility:** The ability to be configured according to the level of availability and system cost required. Simplex, dual, triple, or quad redundant I/O modules allow you to choose between different levels of coverage ranging from simplex to QMR.
- **10 Year Warranty:** All components of the RTP 3000 TAS come with a standard 10 year warranty.

#### Software pricing: NetSuite:

- **Site License:** For a one-time registration fee of \$10,000, you will have unlimited use of the software
- **Project License:** For a one-time registration fee of \$5,000, you will have unlimited use of the software on the particular project that is licensed.
- **Limited License:** For a one-time registration fee of \$2,500, you will have unlimited use of the software of the 2 components of NetSuite, NetArrays and OPC.

**Cyber Security:** In 2011 The RTP3000 TAS was certified to Level 2 of the EDSA 300 standard by Exida. After receiving the EDSA certification RTP added encryption to further enhance the security protection offered by the RTP3000 TAS.