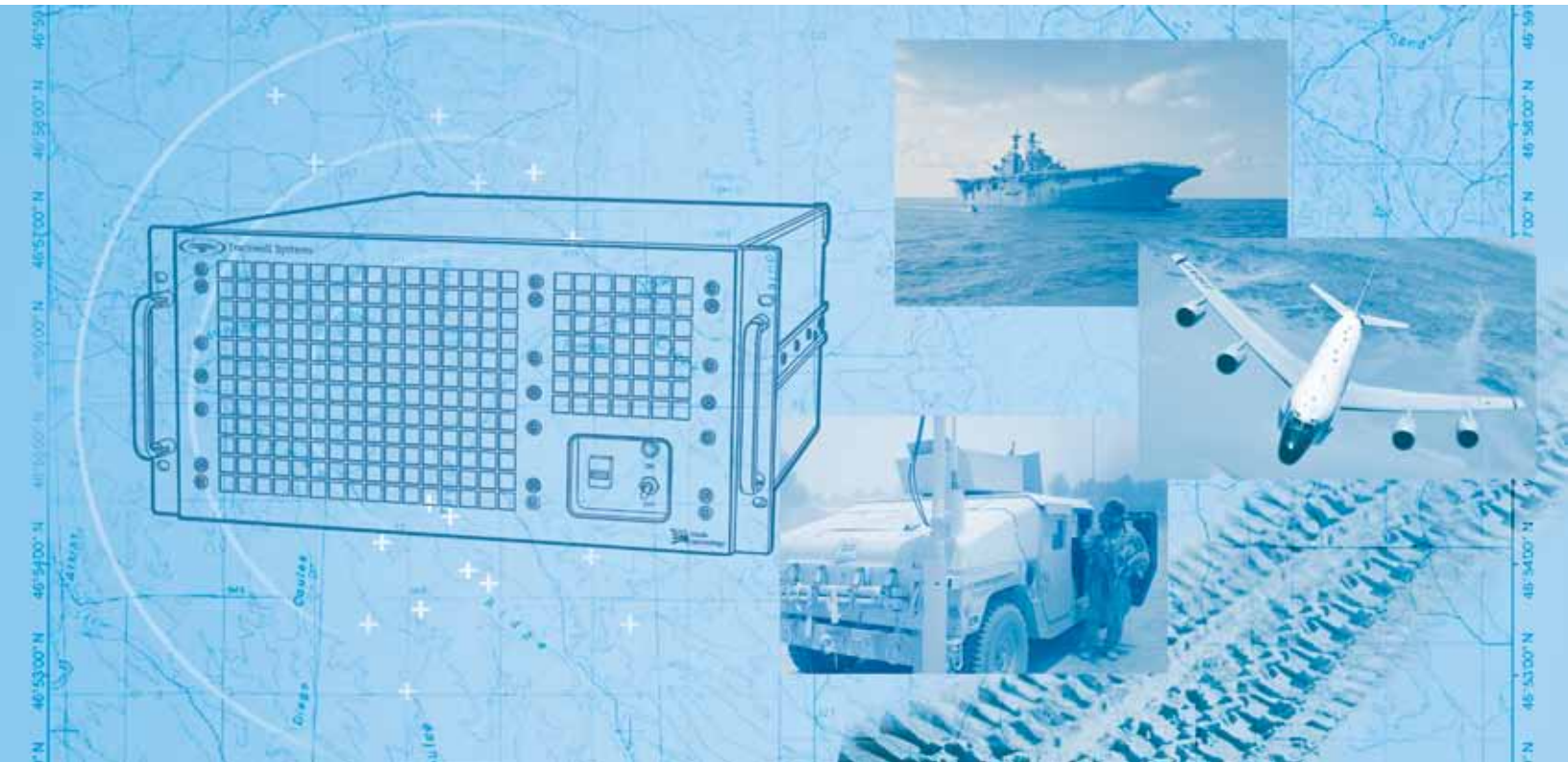


# Tracewell Rugged Blade Systems

*High-performance blade technology for military and aerospace deployments.*



Tracewell Rugged Blade Systems (RBS) are the ideal choice for demanding US Department of Defense class, military and aerospace applications that can benefit from the advanced data processing capabilities of IBM blade server technology. Our solutions are specifically engineered for customers who want to take advantage of the cost and performance benefits of COTS blade technology, but must meet specific size, weight, power and environmental requirements for air, land and sea deployments. Tracewell Systems, based on IBM blade technology, can dramatically reduce costs and significantly increase performance over competing MIL-spec computing products.



## Blade Technology Highlights

### High-performance

Based on IBM Blade technology, delivers best-in-class processing capability

### Flexibility

A variety of blades installed in a single chassis can run multiple operating systems and provide flexibility to mix, match and integrate specialty blades

### Efficiency

Smaller footprint, less cabling and lower power usage in the field

### Long-term optimization

Expand capabilities as new high-performance IBM blade servers become available

### Superior switch flexibility

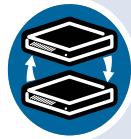
Supports a wide selection of integrated standard and high-speed switching components from industry leaders including Cisco, Nortel, Brocade, QLogic, McDATA, Voltaire and IBM/BNT

### Simple, efficient upgrades

Turns rip-and-replace into plug-and-play, allowing swift integration of new blade servers and modules

## Rugged solutions for advanced application and system requirements

Tracewell Rugged Blade Systems are designed to support high-performance application requirements such as signal intelligence, radar, geospatial intelligence, cloud, data mining & analytics, real-time mission support, as well as battlefield surveillance and mission coordination, on some of the most advanced system architectures.



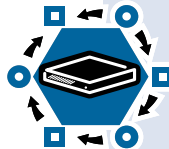
### Blade-to-Blade Systems

For high-performance interconnectivity between processors.



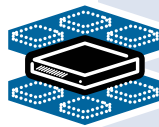
### Blade-to-Network Systems

For high-performance output across wide networks.



### Heterogeneous Systems

For heavy signal processing in architectures with multiple processor units (e.g., x86, Power PC and FPGA).



### Multi-Server Virtualized Environments

For virtualized networks and cloud computing— with wide network, cross application sharing among diverse systems and data formats.

*The only field-tested rugged blade system that delivers high-performance computing in the harshest forward-deployed environments.\**

\* For more information visit: <http://www.tracewell-rbs.com/news/71.html>

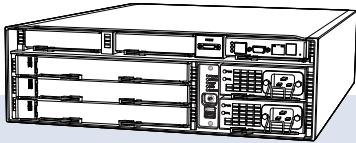


## Ruggedization for the computing power you need, where you need it

Tracewell Rugged Blade Systems are engineered to meet the strict size, weight and power requirements of air, sea and ground vehicles. Our systems can significantly reduce IT footprint and cabling requirements, while delivering the highest performance-to-size ratio. That means more computing power at a lower cost, with less hardware and less cable to manage in the field. Based on IBM blade technology, Tracewell Rugged Blade Systems

achieve the highest levels of availability and reliability. Common management infrastructure and integrated management tools such as IBM Director, Open Fabric Manager and Active Energy Manager ensure optimal resiliency and a more cost-effective IT infrastructure. Tracewell systems offer three exacting levels of ruggedization, available in three-slot or five-slot configurations with standard and high speed switches.

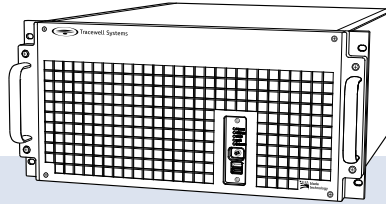
### L1



#### The Cost-Effective MIL-Spec Entry-Level Solution

- For environments where size, weight and power are the overriding considerations, such as aircraft and shipboard installations, as well as shielded transit case systems
- Ideal for development and co-location with other commercial equipment
- High-performance standard COTS IBM blades
- Bonded aluminum low mass chassis
- All I/O and power connections front accessible
- Multiple power supplies: 90–264 VAC, 47–440 Hz input

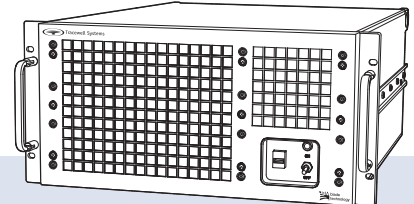
### L2



#### The Next Level of Ruggedization

- For environments that require the added protection of EMI shielding and air filtration
- The same high-performance standard COTS IBM blades and chassis construction of L1, plus:
  - Advanced EMI shielding
  - All networking, KVM I/O and power connections rear accessible, MIL 38999 circular connectors
  - Media tray USB ports front accessible
  - Multiple power supplies: 90–264 VAC, 47–440 Hz input

### L3



#### The Most Rugged Solution Available

- Engineered to meet shock and vibration requirements of forward-deployed environments
- Ideal for ground vehicles and airborne environments
- Fully ruggedized IBM components, switches and management modules
- Machined aluminum chassis
- Advanced EMI shielding
- All networking, KVM I/O and power connections rear accessible, MIL 38999 circular connectors
- Media tray USB ports front accessible
- Multiple power supplies: 90–264 VAC, 47–440 Hz input

### Better

IBM blade technology ensures best-in-class performance, availability, redundancy and reliability

### Faster

Significantly faster than competing MIL-spec computing products

### Cost-Effective

Can reduce technology refresh costs up to 75%, with the highest performance-to-cost ratio

### Rugged

The most rugged, high-performance standard COTS computing solutions available today



Tracewell Systems

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## About Tracewell Systems

Tracewell Systems offers Advanced Form Factor Engineering™ services so organizations can deploy high-performance computing hardware in harsh environmental conditions.

Since 1973, Tracewell Systems has provided innovative design, engineering and manufacturing to some of the nation's largest military, aerospace, and commercial organizations. By applying industry expertise and patented technologies, we create ruggedized systems from commercially available hardware to tailor custom solutions for specific objectives and missions.

For more information on Tracewell Rugged Blade Systems, visit <http://www.tracewell-rbs.com/>



### RUN YOUR MISSION-CRITICAL APPLICATIONS

DATA MINING

SIGNAL INTELLIGENCE

DATA ANALYTICS

CLOUD

GEOSPATIAL INTELLIGENCE

RADAR

### ON YOUR HIGH-PERFORMANCE SYSTEM ARCHITECTURES



Blade-to-Blade Systems



Blade-to-Network Systems

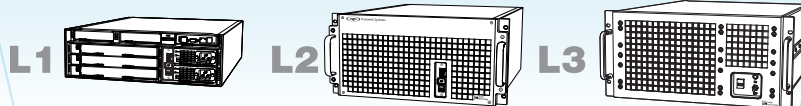


Heterogeneous Systems



Multi-Server Virtualized Systems

### WITH TRACEWELL RUGGED BLADE SYSTEMS



### WHEREVER YOU NEED TO GO!

