

THE SHORT FORM

standard and custom turnkey system enclosures guide



Military COTS



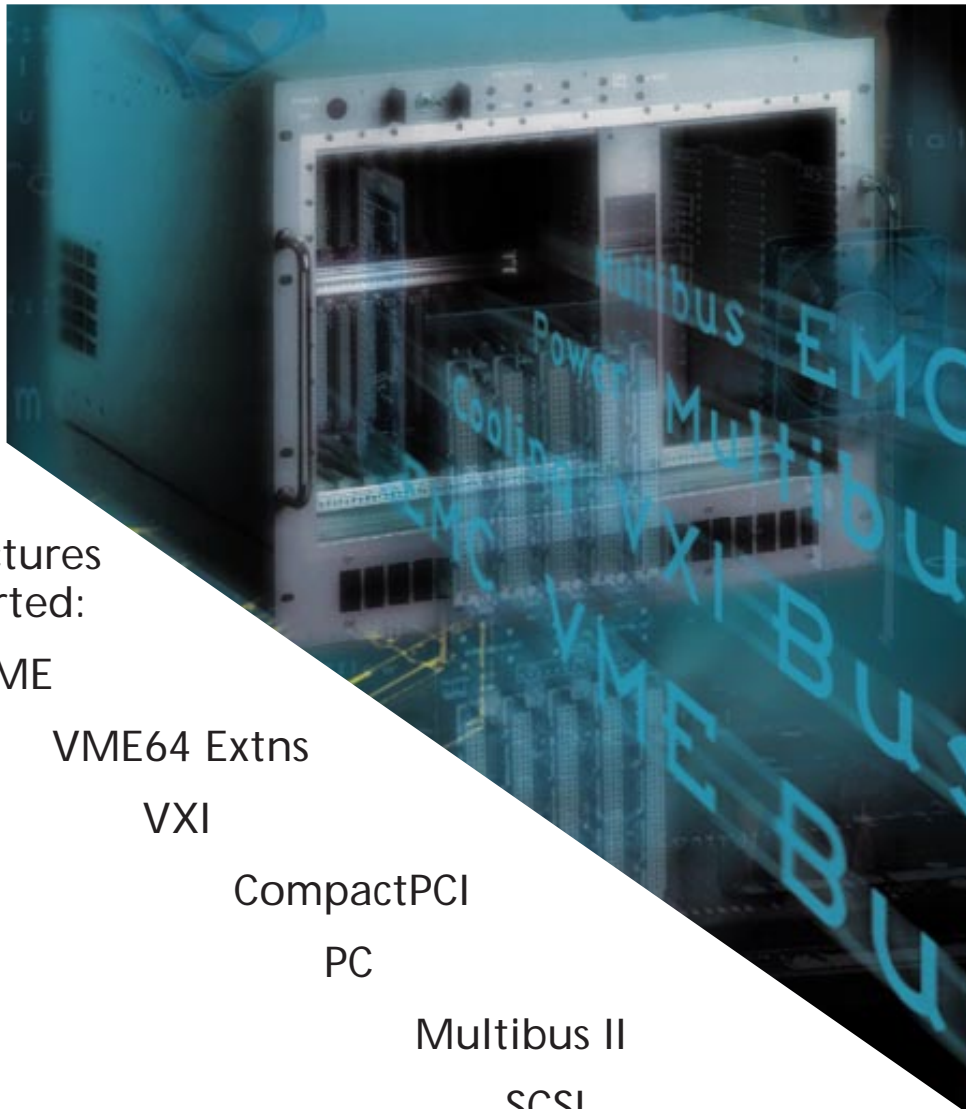
Commercial



Industrial



Telecoms



Bus structures
supported:

VME

VME64 Extns

VXI

CompactPCI

PC

Multibus II

SCSI

and proprietary



MC VERTICAL SERIES

Powered VME EMC Enclosures



- Sizes in 8U, 9U or 10U
- 19" rack mounting or aesthetic desktop EMC enclosure
- 2 to 20 slot VME backplanes
- 200 to 1000 Watt power supplies
- Configured to customer requirements
- Exceeds EN55022 & EN50082
- CE conformity

This range offers outstanding quality and versatility for vertical load applications with dual-purpose rack mount or aesthetic desktop operation. Available in a number of practical height sizes and can accommodate 160mm or 220mm deep Eurocards. A flexible building block approach enables a comprehensive array of application specific options to be incorporated for development or target environments. Also supports Multibus II and CompactPCI.



MR RUGGEDISED VERTICAL SERIES

Powered COTS Enclosures



- Significant savings over full MIL-Spec
- Sizes in 8U, 9U or 10U
- 19" rack mounting
- 2 to 20 slot ruggedised VME backplanes
- 200 to 1300 Watt power supplies
- To MIL-Spec / DEFSTAN specifications
- Configured to customer requirements

This series of ruggedised COTS system enclosures offer substantial savings over traditional full MIL-Spec enclosures without having to compromise quality or performance. Wide variety of power solutions including DC, single and three phase AC 47 to 400Hz inputs. Construction comprises 3mm thick aluminium with welded seam and shock isolated cardframe on cup-type shock mounts. Also supports Multibus II and CompactPCI.



MC HORIZONTAL SERIES

Powered VME EMC Enclosures



- Sizes in 3U, 4U or 5U
- 19" rack mounting or aesthetic desktop EMC enclosure
- 2 to 9 slot VME backplanes
- 200 to 400 Watt power supplies
- Configured to customer requirements
- Exceeds EN55022 & EN50082
- CE conformity

This range offers outstanding quality and versatility for horizontal load applications with dual-purpose rack mount or aesthetic desktop operation. Available in a number of practical height sizes and can accommodate 160mm or 220mm deep Eurocards. A flexible building block approach enables a comprehensive array of application specific options to be incorporated for development or target environments. Also supports Multibus II and CompactPCI.



MR RUGGEDISED HORIZONTAL SERIES

Powered COTS Enclosures



- Significant savings over full MIL-Spec
- Sizes in 3U, 4U or 5U
- 19" rack mounting
- 2 to 9 slot ruggedised VME backplanes
- 200 to 400 Watt power supplies
- Front access PSU and fan LRUs
- To MIL-Spec / DEFSTAN specifications
- Configured to customer requirements

This series of ruggedised COTS system enclosures offer substantial savings over traditional full MIL-Spec enclosures without having to compromise quality or performance. Ideally suited for the deployment of commercial / industrial grade hardware in hostile environments. Comprehensive array of configurable options available from standard range, adaptations or by full customisation. Designed for 100% front access and rapid MTTR (Mean Time To Repair). Also supports Multibus II and CompactPCI.



AIR BAFFLE MODULE

Optimises Thermal Management



- Versatile air baffle
- Eliminates thermal problems
- Operates as a slot bypass
- Provides EMI / RFI screening
- Ruggedised versions available

Designed to occupy unused slot positions in VME, VXI, Multibus II and Euro format cardframes, the Air Baffle offers an effective low-cost answer to maximising airflow and the elimination of thermal management problems. Can also be supplied with IACK and Bus Grant daisy chain jumpering for VME and VXI systems, thereby doubling as a slot bypass module.



Individual data sheets and full data pack available on request.

MA RUGGEDISED ATR SERIES

Powered COTS ATR VME Enclosures



- Ten ARINC case sizes in 1/2 ATR, 3/4 ATR, 1 ATR or 1 1/2 ATR short / long
- 2 to 18 slot ruggedised VME backplanes
- 200 to 1000 Watt custom power supplies
- Configured to customer requirements
- EMC performance to MIL-STD-461 and DEF.STAN 59-41
- Avionics tray mounting in various options
- Input characteristics to MIL-STD-704
- Versatile and affordable

Designed to enable the use of forced air-cooled commercial or industrial grade hardware in airborne or land mobile (Vetronics) applications. Can meet military specifications and yet offers substantial savings over traditional full MIL-Spec enclosures. Cardframe can be shock and vibration isolated with a number of thermal management options. Wide variety of power solutions including DC, single and three phase AC inputs. Large number of configurable options in standard, semi- or full customisation. Also supports Multibus II and CompactPCI.



AVIONICS TRAYS

Support Structures for ATR Enclosures

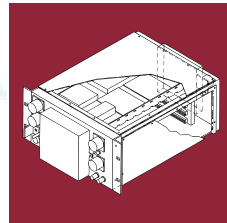


- Shock / vibration isolation
- Thermal interface systems
- Interconnection schemes
- To ARINC 404A specification
- Standard and custom

Complementary to the range of ATR enclosures Mektron offers standard or custom electromechanical and thermal interface systems for fixed / rotary wing aircraft in addition to land mobile and sea going applications.

CUSTOM ENCLOSURES

COTS / Commercial Enclosures



- Commercial, industrial or military
- Lightweight transportable
- Airborne, seagoing or land mobile
- Custom backplanes
- MIL-Spec / DEF.STAN specifications

Why compromise your system solution by trying to force fit standard enclosures into special applications? To Mektron customisation is standard practice, adapting standard models or full custom design is second nature. The company is structured to cater for industry's special enclosure requirements. This coupled with extensive custom electromechanical design, EMC and applications support experience, ensures a highly responsive, flexible and uniquely competitive service. Prototype, small batch and large-scale production volumes can all be easily accommodated.

MH HIGH-AVAILABILITY SERIES

Powered EMC Enclosures



- ETSI compliant to ETS 300019
- 100% front access for Hot Swap
- Rapid Mean Time To Repair (MTTR)
- Redundant power supplies
- AC or DC input
- CE conformity to EN 60950

This series of turnkey enclosures is designed to meet industry's stringent high availability requirements where redundant operation, quick accessibility and high reliability are essential and where downtime is measured in minutes rather than hours. Comprehensive array of configurable options is available to fit the standard model as well as full custom design. Also supports Multibus II and CompactPCI.

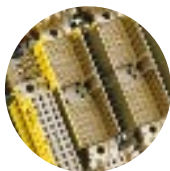


VME / VME64 BACKPLANES

Commercial or COTS Ruggedised

- VME or VME64 Extensions
- Mixed configurations
- Ruggedised COTS version
- Full MIL-Spec version
- Reduced insertion force
- Stiffener bars for added rigidity
- Enhanced power distribution
- Conformally coated

Industry's first COTS VME / VME64 Extensions backplane family designed specifically for military applications with unequalled versatility and an unsurpassed military COTS pedigree. The comprehensive 2 to 20 slot range utilises the same 10-layer, controlled impedance motherboard throughout and offers optimum configuration flexibility. Vertical stiffener bars also help alleviate insertion / extraction forces and may be used for enhanced power distribution.



MR RUGGEDISED VXI SERIES



Powered COTS VXI Enclosures

- Significant savings over full MIL-Spec
- EMC performance to MIL-STD-461, DEFSTAN 59-41 and TEMPEST
- To MIL-Spec / DEFSTAN specifications
- Configured to customer requirements

This versatile range of cost effective ruggedised COTS VXI system enclosures offer substantial savings over traditional full MIL-Spec enclosures without having to compromise quality or performance. Construction comprises 3mm thick aluminium and locking bushes with VXI modules shock and vibration isolated. Power options include DC, single and three phase AC inputs with various thermal management solutions. Available in various configurations and height options.

MC COMMERCIAL VXI SERIES

Powered EMC VXI Enclosures

- Sizes in 8U, 9U or 10U
- 19" rack mounting or aesthetic desktop EMC enclosure
- 5, 7 or 13 slot backplanes
- 600 to 1200 Watt power supplies
- Plug-in fan tray and power supply
- Rapid Mean Time To Repair (MTTR)
- Configured to customer requirements
- Exceeds EN55022 & EN50082

This comprehensive range of high performance, turnkey system enclosures has been designed specifically for optimum EMC performance, quick MTTR and configurational flexibility. Ultra high performance stripline VXI 'C' size backplane with active automatic Bus Grant and IACK switching. A wide array of application specific options may be incorporated.

ML LIGHTWEIGHT VXI RAPID DEPLOYMENT SERIES

Powered COTS VXI Transportable Enclosures

- Ultra lightweight
- Ruggedised composite construction
- Shock / vibration isolated mainframe
- Front access PSU and fan LRUs
- Rapid Mean Time To Repair (MTTR)
- To MIL-Spec / DEFSTAN specifications
- DC or single / three phase AC input

This lightweight composite VXI enclosure has been developed specifically for rapid deployment ATE and data acquisition applications in hostile or benign environments. Believed to be unique, this system has undergone extensive EMC, environmental and safety testing to onerous Defence / Military standards. Available in various configurations and height options.

VXI 'C' SIZE POWER SUPPLY

Mainframe Power on a Card

- Compact VXI 'C' size module
- High power, light and robust
- Up to 750 Watts of DC output
- Ruggedised or commercial versions
- DC or single / three phase AC input
- COTS – NDI (Non Developmental Item)
- Locates adjacent to 13 VXI modules

A revolutionary range of instrument size VXI mainframe power supplies with ruggedised or commercial grade build standards. Ideally suited to situations where weight, size and Mean Time To Repair (MTTR) need to be kept to a minimum. Can be configured adjacent to a full complement of 13 VXI modules within a standard 19" rack. DC output rails: +5V, -5V2, +12V, -12V, +24V, -24V & -2V.



COMPOSITE TRANSPORTABLE ENCLOSURES AND TRANSIT CASES

For Electronics on the Move

- Lightweight composite construction
- Excellent survivability and longevity
- Resistant to projectile impact
- Hermetically sealed
- Full MIL-Spec test history
- Standard or custom models
- EMI / RFI shielding

Transportable electronic enclosures and cases can be supplied as standalone products or as part of an integrated packaging solution. Hundreds of users world-wide have trusted the survival and operational efficiency of their equipment to this excellent range of enclosures and cases.



COMPANY OVERVIEW

Mektron Systems Limited specialise in the design, development and manufacture of standard and custom turnkey bus-based system enclosures for commercial and military applications.

Since its foundation in 1995 Mektron Systems Limited has swiftly established itself as a highly successful and distinguished specialist in the systems packaging market.



The company's immediate and continuing success can be attributed to its highly focused and extensively experienced team of engineers coupled with the ability to supply exactly what the discerning customer wants.

Mektron Systems Limited is an approved supplier to a rapidly growing number of international blue chip commercial and defence companies and has extensive involvement in a number of major defence programmes. Mektron is a BS EN ISO 9001 registered company and is a recognised authority on EMC, has 100% test and inspection, CE conformity and a "right first time" ethos – all of which enables it to continually exceed customers' expectations.



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