DataMetrics™

MODEL 7204
MULTI-ARCHITECTURE
SERVER CHASSIS

*Previously Model #7000-RC

DataMetrics Corporation
45 YEARS
1962 - 2007

Key Features

• Rugged Chassis-In-Chassis Design with Shock-Isolated Inner Chassis

• Supports Popular Backplanes, such as VME, VME64x, VITA 31, VITA 41, VITA 46, CompactPCI 2.1, CompactPCI 2.16, and Custom Configurations

• Supports 3U x 160mm Plug-In Boards (When Configured with Appropriate Backplane)

• Supports Single or Multi-CPU motherboards, such as Core2 Duo, XEON, FX/AM2, Opteron

• Shock Meets MIL-STD-810F/516.4 VI

• Vibration Meets MIL-STD-810F/514.4-I

• Drip-Proof per MIL-STD-810F/506.3-II

• Fungus Resistant per MIL-STD-810F/508.4-I

• EMI/EMC Meets MIL-STD-461E

• Front Accessible Fixed Drive and Removable Drive System

• Optional Chassis Environmental Monitor

• Aluminum or Steel Chassis

• Customer Definable Configurations or Complete Custom-Design Chassis Available

ISO 9001
REGISTERED FIRM

Model 7204 Overview

Model 7204 is a new member of Data**Metrics™**' lineup of rack mountable Rugged Commerical-Off-The-Shelf (RCOTS) chassis products. Originally designed as a dual processor server chassis deployed in the Iraq conflict, the Model 7204 meets essential high-reliability MIL standards, such as 810, 461 and 1686. The Model 7204 resilience comes from its unique "chassis-in-chassis" design with a shock isolated inner chassis. Moreover, it is highly resistant to airborne dust and sand. Easily-accessed air filters make service simple and fast.

As with many of Data**Metrics™** COTS and RCOTS chassis, Model 7204 is available in various standard configurations, notably passive backplanes and active motherboards. Specific backplane architectures that can be ordered include VME, VME64x, VITA 31/41/46, CompactPCI 2.1 or 2.16, and PICMG PCI. Popular motherboard form-factors that Model 7204 accommodates include ATX and mini-ATX. The fully customizable Model 7204 also accommodates fixed and removable drive configurations.

With its aggressive push-pull cooling system, various single and multi-core CPU types will operate without issue when exposed to an operating temperature range of -10°C to +50°C. Additional security can come from an optional ethernet based system monitor which tracks and regulates internal temperature, fan speed, input voltages, and more.

Contact Data**Metrics™** to design your custom chassis today!

Fully Mission Capable™

Environmental Characteristics

Temperature - Operating . . . . .-10ºC to 50ºC
Temperature - Storage. . . . . .-40ºC to 70ºC
Humidity. . . . . .10% to 98%, Non-condensing
Sand & Dust . . . . .Highly resistant
Rain .MIL-STD-810F, Method 506.4, Procedure III
Fungus. . . . . .MIL-STD-810F, Method 508.5
Orientation . . . .±30º from horizontal, any axis
Vibration . . . . .MIL-STD-810F, Method 514.5, Procedure I
Shock. . . . . .MIL-STD-810F, Method 516.5,
Procedure I & VI
Altitude - Operating . . . .-1,000 ft. to 15,000 ft.
Altitude - Non-operating. . . . .-1,000 ft. to 40,000 ft.
EMI/EMC MIL-STD-461E, CE101, CE102, CS-101,
CS114, RE101, RE102, RS102, RS103
ESD .MIL-STD-1686A

Performance Characteristics

Backplane - Standard . . . . . . .ATX Motherboard configuration
Backplane - Optional. . . . . . . .VME, VME 64x, VITA, CPCI, or custom
Cooling . . . . .Convection Cooled – 1 ea 130 CFM Fan
1 ea additional power supply fan
Fans are environmentally speed controlled
Temperature Sensing . . . . . .Optional System Monitor constantly measures selected temperature points
Power Supply . . . . .System monitor constantly measures input AC voltage and DC voltage outputs
*Refer to System Monitor data sheet for info.

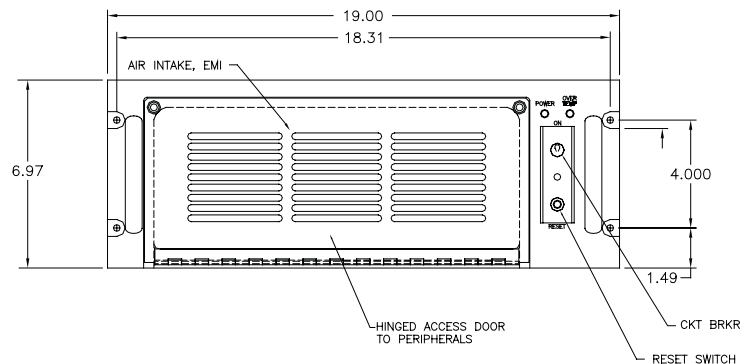## Electrical Characteristics

Power – Standard . . . . .95 - 250 Vac, 47 - 440 Hz
Power – Optional . . . . .28 Vdc
Voltage Holdup . . . . .Per MIL-STD-704A, 50ms for 650W Load
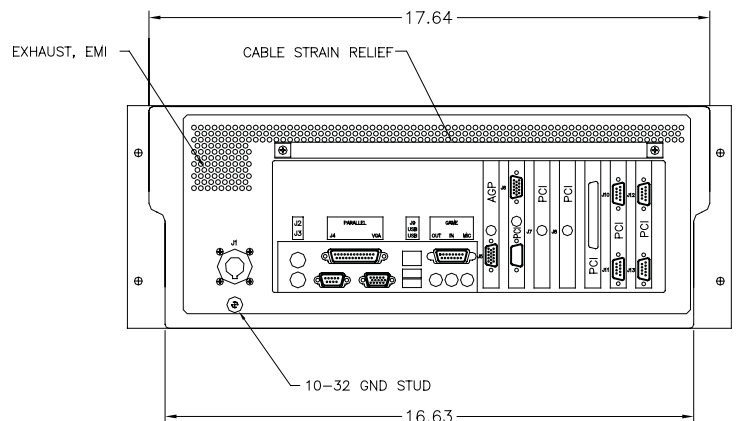Power Consumption . . . . . . .150W nominal

Physical Characteristics

Size .4U 7″ H x 16.91″ W x 20″ D
Weight . . . . .40 lbs.
Rack Mount . . . . .RS-310 RETMA

Front View

Back View (Motherboard Configuration Shown)

Ordering Information

Part Number	Description
7204-051X-C000	PC Base, 4U, 5 Slot, VME, Clear Chem. Finish
7204-052X-C000	PC Base, 4U, 5 Slot, VME64x, Clear Chem. Finish
7204-053X-C000	PC Base, 4U, 5 Slot, VITA, Clear Chem. Finish
7204-124X-C000	PC Base, 4U, 12 Slot, CPCI, Clear Chem. Finish
7204-077X-C000	PC Base, 4U, 7 Slot, ATX, Clear Chem. Finish
7204-059X-C000	PC Base, 4U, 5 Slot, Custom Backplane Configuration, Clear Chem. Finish

Standard Configuration 7204-0770-C000
Picture Shown with Paint Code P039 - Semi-Gloss Black Medium Texture
"X" indicates ordering options for additional features.
Contact DataMetrics for other options and custom configurations.

Technical Specifications are subject to change without prior notice.

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