

ART, inc.

CIRRUS-High Density Computer

*ART uniquely blends
system engineering,
ruggedization
and system integration
capability to ensure
every customers' needs
are fulfilled.*



ART is a proven systems integrator providing survivable, rugged, mission-critical airborne and airborne related Command, Control, and Communications (C3) and ISR systems.

Overview

The ART CIRRUS-HDC is a high density computing platform that provides a modular open systems approach with the adoption of the Advanced Telecommunications Computing Architecture (ATCA). The system is based off a 6-slot 6U ATCA footprint and includes specialized weight reduction techniques to provide a SWAP optimized solution

Features at a Glance

- RTCA DO-160 Qualified
- Lightweight 41lb Chassis
- Front to Back Airflow with EMI Filtering
- Built-in-Test Status Panel
- Front Access to Removable Hard Drive Bay
- Ethernet Service Port
- Blind Mate Docking to Fixed Cable Assembly
- Custom Slide Rails Support EIA Standard Mounting
- Transport Handles Support Two Person Lift

Contact your Sales Manager for the latest in options and configurations.



ART, inc.

Alpha Research & Technology, Inc.
1107 Investment Blvd, STE 200
El Dorado Hills, CA 95762-5742
Phone: (916) 431-9340
Fax: (916) 431-9360

Email: BusDev@ARTruggedsystems.com
Website: www.ARTruggedsystems.com

CONFIGURATION

ENVIRONMENTALS

CHARACTERISTICS

SIZE

- 6U EIA Standard Chassis
- 10.4"H x 19"W x 20.8"D
- 41lb Chassis (estimated max payload configuration of ~105lbs with six processing boards)

99-15814 Configuration (fielded FY14):

- Weight: 76.2lbs
 Power: 626 watts (typical), 1,157 watts (in-rush)
 10 Gigabit Sun and Intel® System with external Copper Ethernet
- (1) Sun SPARC Server Board
 - (1) Intel® Xeon 10 Gigabit Server Board
 - (1) 10 Gigabit Switch Board
 - (3) Copper Rear Transition Modules
 - (1) AMC Ethernet Switch
 - (1) Pigeon Point Shelf Manager
 - (1) 8 disk drive bay 2.5" SAS or SATA HDD/SSD

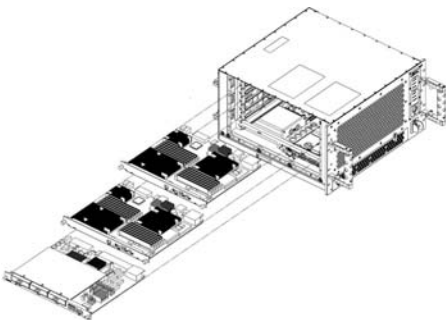
99-15814-002 Configuration (fielded FY15):

- Weight: 65.2lbs
 Power: 604 watts (typical), 1,111 watts (in-rush)
 10 Gigabit Intel® System with external Copper Ethernet
- (2) Intel® Xeon 10 Gigabit Server Boards
 - (1) 10 Gigabit Switch Board
 - (3) Copper Rear Transition Modules
 - (1) Pigeon Point Shelf Manager
 - (1) 8 disk drive bay 2.5" SAS or SATA HDD/SSD

99-15814-003 Configuration (Fielding FY16)

- Weight: ~65.2lbs
 Power: ~650 watts (typical), ~1,300 watts (in-rush)
 40 Gigabit Intel® System with external Optical Ethernet
- (2) Intel® Xeon 40 Gigabit Server Boards
 - (1) 40 Gigabit Switch Board
 - (3) Optical Rear Transition Modules
 - (1) Pigeon Point Shelf Manager
 - (1) 8 disk drive bay 2.5" SAS or SATA HDD/SSD

Call for Custom Configurations to meet specific requirements.



TEMPERATURE

RTCA/DO-160F Section 4 Category A4 Qualified
 Operating / Non-Operating
 -15°C to +55°C / -55°C to +85°C

HUMIDITY

RTCA/DO-160F Section 6 Category A Qualified
 95% Relative Humidity

VIBRATION

RTCA/DO-160F Section 8 Category S Qualified
 Test Curve B (1.48 G_{RMS}) 1 hr per axis random vibration

OPERATIONAL SHOCK

RTCA/DO-160F Section 7 Category B Qualified
 6g at 11ms per axis

CRASH SAFETY

RTCA/DO-160F Section 7 Category B Qualified
 20g all axis

EMI/EMC

RTCA/DO-160F

- Sec. 18 Category R
- Sec. 19 Category CC
- Sec. 20 Category W
- Sec. 21 Category M

MIL-STD 461F CS101, CS114, CS115, CS116, RS103, CE102, and RE102

ALTITUDE

RTCA/DO-160F Section 4 Category A1 Qualified
 35,000 feet operating

RAPID DECOMPRESSION

RTCA/DO-160F Section 4 Category A1 Qualified
 8,000 to 35,000 feet within 15 seconds



GENERAL:

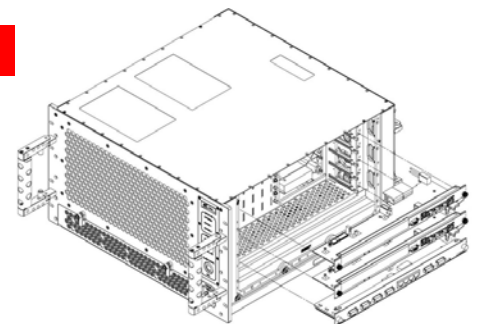
- +48VDC input power
- 50A circuit breaker switch
- ARINC 600 style blind mate pin/socket connector (Amphenol MMA)
- Ease of maintenance with custom slide rails and blind mate docking design

MECHANICAL/ ELECTRICAL CONSTRUCTION

- Lightweight aluminum chassis construction
- Gold Alodine and Black Anodize plating
- Corrosion resistant
- All stainless steel hardware.
- Nickel plated connectors and EMI/EMC shielding
- All Teflon®, EMI shielded data and power cabling
- Wide temperature range using military or industrial grade power components

ITAR Disclaimer:

Some ART Inc. products in part or whole are strictly regulated by the US Department of State in accordance with the guidelines in the International Traffic in Arms (ITAR) per title 22, Code of Federal Regulations (CFR), Parts 120-130 and/or the United States Bureau of Industry and Security US Department of Commerce. All sales and shipping are subject to license approval by the respective governing agency. End-User certificates must be supplied. Users must comply with all local, state and federal laws. Descriptions of our products and systems are published for informative purposes only and do not constitute an offer to sell.



The information in this document is subject to change without notice and should not be construed as a commitment by Alpha Research & Technology, Inc. Alpha Research & Technology assumes no responsibility for any errors that may appear in this document.



Alpha Research & Technology, Inc.
 1107 Investment Blvd., STE 200
 El Dorado Hills, CA 95762-5742
 Phone: (916) 431-9340
 Fax: (916) 431-9360
 E-Mail: BusDev@ARTruggedsystems.com
 Website: www.ARTtruggedsystems.com