

# Liquid Cooled 1 ATR Chassis, Tall, Short

## Air Transport, Rugged, for 6U VPX Boards

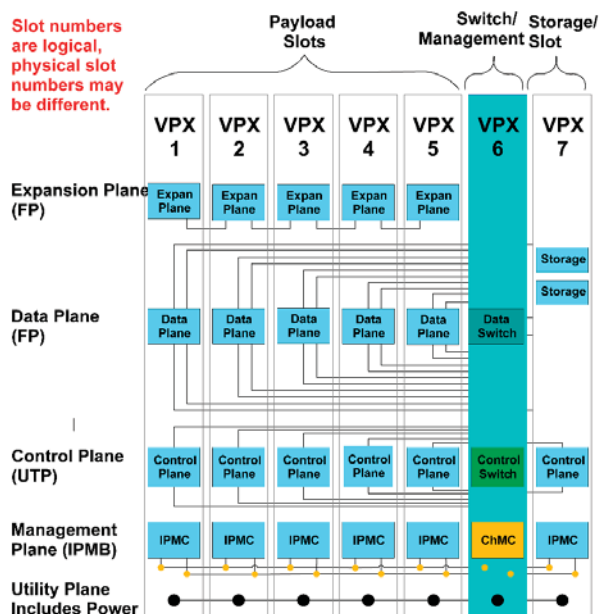


### FEATURES:

- 1 ATR platform with liquid cooled side walls, 6U conduction cooled boards, 1" pitch, per VITA 48.2 (REDI) and VITA 65 (OpenVPX™)
- 6U, 7-slot backplane, 1" pitch per VITA 65 Backplane Profile BKP6-CEN07-11.2.3-n (Slots: 5 nodes, 1 storage, 1 switch)
  - Additional backplanes: VME, VME64x, VXS, cPCI, and custom
- COTS/MOTS modular design according to ARINC 404A
- All aluminum with electron beam welded fluid channels in side walls
- Designed to meet environmental MIL Standards 810G and 461E
- Cools up to 100 W per slot
- Choice of power supply: 500W 6U plug-in or fixed-mount 400 W
- Input power: 28 VDC and 270 VDC per MIL-STD-704E
  - 1 and 3 phase 115 VAC, 400 Hz on request
- Custom I/O options including MIL-STD wiring and connectors
- Choice of cooling fluids: Dielectric fluids (PAO), inhibited glycol/water solutions (PGW, EGW), kerosene

The modular design of this ATR platform enables easy size scaling by using the same liquid-cooled side walls. Various plug-in power supply modules and custom front I/O configurations are possible. Backplanes in multiple architectures are also available.

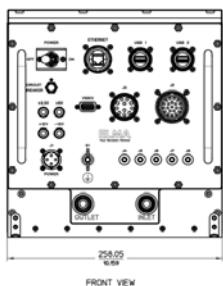
### BACKPLANE DETAILS



### SCOPE OF SUPPLY

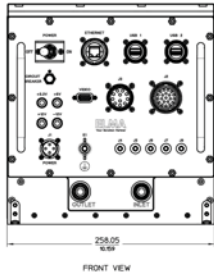
The all-aluminum ATR incorporates Mil-grade components like MIL-STD-38999 connectors, integrated sensors, line filters, on/off and reset switches, LEDs, fuses, breakers etc. EMC shielding compliant to MIL-STD-461E. Fan options include the use of a Mil-grade high altitude fan tray which can operate under extremely harsh temperature conditions. Depending on specific applications, commercial, industrial, or Mil-grade power supplies are available.

### ORDERING INFORMATION

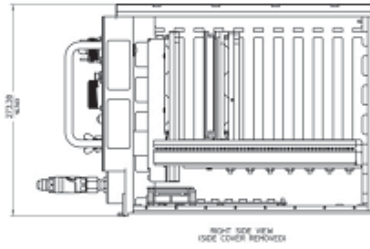


| Description  | Order Number  |
|--|---|
| <ul style="list-style-type: none"> <li>• 1 ATR Platform, tall, short, liquid cooled</li> <li>• Dimensions: 10.625"H x 10.12"W x 12.52"L</li> <li>• 7-slot 6U OpenVPX backplane, BKP3-CEN07-15.2.3-n</li> <li>• Liquid cooled side walls</li> <li>• 500 W plug-in power supply modules</li> </ul> | <p>ATRCTS07ASNXLTQE4</p> <p style="text-align: right;"><b>ATR</b></p> |

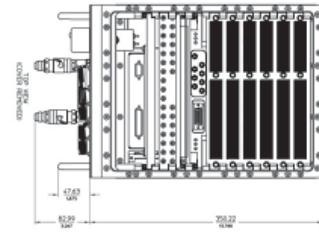
## LINE DRAWINGS



Front View



Side View



Top View

## ENVIRONMENTAL

**Temperature, Operating / Storage & Transit (per MIL-E-5400T Class 2):**

-55°C to +70°C / -62°C to +95°C

**Altitude:**

75,000 feet

**Humidity:**

95% non-condensing for 240 hours

**Shock per MIL-STD-810G:**

40 g @11 ms half sine

**Vibration per MIL-STD-810G:**

20 to 2000 Hz at 5 g, sweep rate of 3 octaves per minute

**Agencies:**

Designed to meet MIL-STD-810F, MIL-STD-901D, & MIL-STD-461F (CE102, CS101, CS114, CS115, CS116, RE102, RS103)

**Weight:**

25 lbs. (including backplane)

## OPTIONAL COMPUTING PRODUCTS

Elma offers a wide range of boards and integrated solutions to meet your embedded sub-system requirements. Consider us an extension of your team; ask how we can cut your development time so you can focus on your own expertise.

- 3U VPX and OpenVPX™ compliant single board computers
- Storage solutions; Secure, Rugged, NAS, RAID.
- Blade level networking boards (fabric switches)
- FPGA configurable I/O solutions
- Ruggedization programs



## ADDITIONAL ENCLOSURE OPTIONS

Elma manufactures a wide range of rugged enclosures for convection and conduction cooled environments. Please visit our website or call sales for more details.

