19” Rackmount Rugged Chassis Platforms—Air Cooled

RR19XUFAC6—6U Boards

KEY FEATURES

- 2U-12U rugged chassis platforms for 6U OpenVPX boards
- Designed for use in MIL-810 and MIL-901D systems for shock/vibration
- Designed to meet MIL-461 for EMI
- Humidity levels of 0% and 95% non-condensing, conformal coating options
- Ruggedized PSUs to MIL specs with VITA 62 options to 1500W each
- Versions with RTM access are optional
- Options with up to 50 ms hold-up time
- 6U OpenVPX or other/custom backplanes
- Vertical mount for 8U-12U versions, 2U-6U are horizontal-mount
- MIL-grade fans and cabling
- Front-to-rear cooling standard with other cooling options available
- Temperature ranges of −20C to +70C (industrial rugged) up to −40C to +85C (MIL rugged)

The RR19XUFAC6 is a rugged rackmount chassis platform for use in Mil/Aero or other harsh environments. It is designed to meet shock/vibration to MIL-810 and 901D and MIL-461 for EMI. The chassis features air and power filtering with optional power redundancy and hold-up time. 6U OpenVPX backplanes are typical, but other architectures are available. Options for VITA 66 (optical), VITA 67 (RF), and for SOSA/HOST requirements.

Various PSU input and output options are available. For rugged designs typically VITA 62 or comparable PSUs are used.

Pixus specializes in customized configurations, contact us to discuss your specific requirements.
POWER

The RR19XUFAC can employ various grades of PSUs. Typically 6U tall VITA 62 PSUs are utilized, up to 1500W each. However, other PSU options are available. VITA 62 power supplies are designed for avionics and other MIL rugged applications and conform to MIL-STD-704, 461, and 810. There are also various options for AC or DC power feeds (typically 24-48VDC, or 90-264 VAC, 3-phase AC). Consult with Pixus for your power requirements.

INTERNAL EXAMPLE—Horizontal Mount Version
Rear Example — Vertical Mount Version

VITA 67.3 RF Example - deep boards

Model of Vertical Mount Style
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Dimensions</th>
<th>Height: 2U-12U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitch</td>
<td>Width: 19”</td>
<td>Depth: 12.5” - 23”**</td>
</tr>
<tr>
<td>Type</td>
<td>*consult Pixus for other size options</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standards</th>
<th>DO-168 Type</th>
<th>DO-168 options</th>
</tr>
</thead>
<tbody>
<tr>
<td>VITA/ANSI</td>
<td>Backplane, Chassis</td>
<td>VITA 65 for OpenVPX (optional), IEEE 1101.10/.11, VITA 66 (optical) options, VITA 67 (RF) options, VITA 48</td>
</tr>
<tr>
<td>MIL-STD</td>
<td>Type</td>
<td>810F (shock, vibration to 20G, environmental), 461F (EMI)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Power Type</th>
<th>Options for 24-28VDC, 48VDC, 90-264VAC input @ 47-880Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Temperature</td>
<td>Operating temperature: up to -40° to +85°C</td>
</tr>
<tr>
<td></td>
<td>Altitude</td>
<td>Storage temperature: up to -55° to +90°C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Up to 30,000ft operating, other options available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Conformal Coating</th>
<th>Upon request (See page 4 selection “J” for available options)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 and 95% humidity, non condensing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th>MTBF</th>
<th>Varies, consult factory for specifics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Certifications</td>
<td>Designed to meet FCC, CE and UL certifications where applicable</td>
</tr>
<tr>
<td></td>
<td>Standards</td>
<td>ISO9001:2015</td>
</tr>
<tr>
<td></td>
<td>Compliance</td>
<td>Designed to MIL-STD-810, MIL-STD-461 (optional)</td>
</tr>
<tr>
<td></td>
<td>Warranty</td>
<td>Two years</td>
</tr>
<tr>
<td></td>
<td>Trademarks and logos</td>
<td>The Pixus Logo is a registered trademark of Pixus Technologies Inc. other registered trademarks are the property of their respective owners. Specs. subject to change without notice.</td>
</tr>
</tbody>
</table>
ORDERING OPTIONS

RR19XUFAC6-HABCCD-EFGI-J

H = Height
   1 = 2U
   2 = 3U
   3 = 5U
   4 = Other
   5 = 9U
   6 = 10U

A = Backplane
   1 = 6U OpenVPX (standard)
   2 = Other

B = Backplane Speed
   1 = 6.25 GB/s
   2 = 8 GB/s (for PCIe Gen3)
   3 = 10 GB/s (for 40GbE)
   4 = Other

CC = Payload Slots
   Example 0n = n slots
   01 = 1 slot
   02 = 2 slots
   03 = 3 slots
   09 = 9 slots

D = PSU Slots
   1 = 1 VITA 62 slot
   2 = 2 VITA 62 slots
   3 = Other

E = PSU Input
   1 = 12-36V DC
   2 = 90-230V AC
   3 = 48V DC
   4 = Other

F = PSU Output
   1 = Up to 1000W
   2 = Reserved
   3 = Up to 2400W
   4 = Reserved
   5 = Other

G = Hold-up Time
   0 = n/a
   1 = 50 ms
   2 = Other

I = Cooling
   1 = Front-to-rear
   2 = Other

J = Conformal Coating
   0 = None
   1 = Humiseal 1A33 Polyurethane
   2 = Humiseal 1B31 Acrylic