12R1 Rugged Chassis - Low Weight

FEATURES

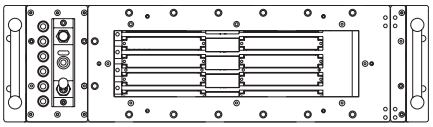
- VME, VME64x, VXS, VPX and cPCI compatible
- Ideal for airborne applications where weight is a premium
- 20-25% less weight than comparable rugged chassis
- 2U-10U heights, horizontal or vertical card orientation options
- Complete EMC integrity via braided gasketing and honeycomb filtering, blind-riveting design
- Rugged chassis shell made of aluminum frames and extruded profiles
- 350-1400 watt power supplies
- 90 - 264 V AC input, 47 - 500 Hz with optional 28V/48V DC input
- Wide range of backplane options 2-20 slots
- Compliant to IEEE 1101.10/.11 mechanical specifications
- Configurable IO patch panel on rear
- Rear mounted fans (pull-configuration) standard
- Standard voltage and system monitoring LEDs
- Shelf management option
- Tested for shock, vibration, and structural integrity
- Withstands 15 G's 11ms (shock and vibration resistance)
- Custom configurations available

PRODUCT INFORMATION

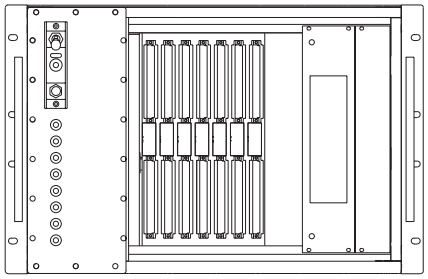
The 12R1 platform is a lighter version of the 12R2 platform and is used for rugged applications with weight restrictions and less stringent shock and vibration requirements. The modular 12R1 platforms range from 2U to 10U height with horizontal and vertical board orientations. The all-aluminum shell design consists of extrusion and sheet metal, joint together with stainless steel screws. The chemical conversion coating provides corrosion protection and electrical conductivity. Custom paint finishes are also available. A hinged front panel ensures unobstructed access to boards and drives. Located on the rear is a large patch panel for I/O connection. Exceptional front-to-rear cooling is achieved by a rear evacuative cooling system employing high CFM blowers. Additional fans may be installed under the card cage in applications with high impedence boards. To meet IP53 (spray water) according to IEC 60529, louved air intake and exhaust openings are available upon request.

12R1 SPECIFICATIONS

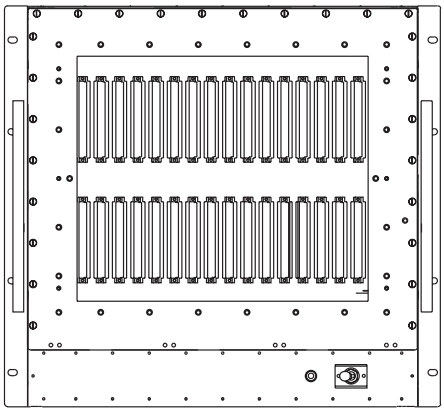
PHYSICAL			ELECTRICAL		ENVIRONMENTAL	
Depth	22", 25"		Frequency	47-500Hz	Operating Temp.	0°C to 65°C
Heights	3U (8.71")		Voltage Input	90-264 VAC	Storage Temp.	-20°C to 85°C
	7U (13.96")			28/48 VDC	Humidity	0 to 95%, non-condensing
	10U (17.46")		Power	300W-14000W	Altitude	-1,200 to 18,000 Ft.
	Custom		Outputs	+5V, +3.3V, +/-12V	Shock	15Gs 11ms
Width	17.1"				Vibration	2.5Gs RMS 15 to 2000Hz
	(19" Rack Mount)				Acceleration	3Gs w/o disk
Weight	3U	45 lb. Typ.			Sand and Dust	Blowing
	7U	60 lb. Typ.			Salt/Fog	Limited
	10U	70 lb. Typ.			Fungus	Limited



Description	Order Number
■ 3U h x 25" d ■ Holds 5, 6U x 160mm cards, shock isolated, horizontal ■ 5 slot VME64x backplane w/P0 ■ Holds 1 x 3.5" and 1 x 5.25" HH device ■ 350 watt, 90-264VAC Fixed PSU, 47-500 Hz	12R105OPXX38N5HCB4



Description	Order Number
■ 7U h x 22" d ■ Holds 5, 6U x 160mm cards, shock isolated, vertical ■ 7 slot VME64x backplane w/P0 ■ Holds 1 x 3.5" and 1 x 5.25" HH device ■ Fixed mount devices ■ 750 watt, 90-264VAC Fixed PSU, 47-500 Hz	12R107OP9F78N5VGD



Description	Order Number
■ 10U h x 22" d ■ Holds 5, 6U x 160mm cards, shock isolated, vertical ■ 20 slot VME64x backplane w/P0 ■ Holds 1 x 3.5" and 1 x 5.25" HH device ■ 750 watt, 90-264VAC Fixed PSU, 47-500 Hz	12R120PXA8Y5VCJ2

12R1 Order Key

1 2 R 1 ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑

PRODUCT CODE | SLOTS | BP BARE BOARD | BP CONNECTORS | DRIVES | DEVICE MOUNTING | HEIGHT | WIDTH | CARD CAGE | DEPTH | CARD ORIENTATION | PSU INPUT | PSU OUTPUT | SHIELDING

❑❑ NUMBER OF SLOTS BP
00-20: Single BP AY-YA: Split
Example: 7 slot = 07
Example: 12 + 9 = LI

❑ BP BARE BOARD
A = CPCI (RSS), 6U
K = VITA 31.1
L = VXS (DS)
M = V64, J12 mono, 3 row
N = VME64X, 6U
O = VME64X, 7U
P = VPX, 6U (VITA 46)
W = VPX, 3U (VITA 46)
S = VXS (SS)
T = VXS (Mesh)
U = CPCI Express, 3U
X = No BP installed
Z = Custom

❑ BP CONNECTOR CONFIG. J1/J2/P0
L = 5 row, w/o P0, w/ RT-2
M = 3 row, J1 flush, J2 13mm
N = 3 row, J1/J2, 17mm
O = 5 row, w/o PO
P = 5 row, w/ PO
Q = 3 row, 13mm
R = 3 row, 17mm
S = RT-2 (J0-J6) 6U
U = RT-2 (J0-J2) 3U
D = CPCI (P1 & P2 S; P3, P4, P5 L)
X = No connectors
Z = Custom

❑ DRIVES
1 = 1 x 3.5"
2 = 2 x 3.5"
3 = 1 x 5.25" HH
4 = 2 x 5.25" HH
5 = 4 x 5.25" HH
6 = 2 x 3.5", 1 x 5.25" HH
7 = 1 x 3.5", 2 x 5.25" HH
8 = 2 x 3.5", 2 x 5.25" HH
9 = 1 x 3.5", 1 x 5.25" HH
A = 1 x 2.5", 1 x CDROM (SL)
B = 2 x 2.5"
C = 6 x 5.25" HH
X = Not installed

❑ DEVICE MOUNTING
F = Fixed mount devices
I = Shock isolated devices
X = N/A

❑ HEIGHT
2 = 2U
3 = 3U
4 = 4U
5 = 5U
6 = 6U
7 = 7U
8 = 8U
A = 10U

❑ WIDTH
8 = 84T

❑ CARD CAGE
Y = Fixed w/ Rear I/O
N = Fixed no Rear I/O
F = Isolated w/ Rear I/O
I = Isolated no Rear I/O

❑ DEPTH
3 = 300mm - 399mm
4 = 400mm - 499mm (22")
5 = 500mm - 599mm (25")

❑ CARD ORIENTATION
V = Vertical
H = Horizontal
T = Top Load

❑ PSU INPUT
C = 90-264VAC (Fixed)
G = 90-264VAC (Plug in)
H = 48VDC (Plug in)
I = 28VDC (Plug in)
K = 48VDC (Fixed)
M = 48VDC (2 x HS, N+1)
N = 24VDC (Fixed)
O = 24VDC (2 x HS, N+1)
P = 90-264VAC (2 x HS, N+1)
Q = MIL-STD-704A, 28VDC
R = MIL-STD-704A, 90-230VAC
X = No PSU

❑ PSU OUTPUT
(Note: Not all PSU combinations available)
1 = 150 watt (w/o 3.3V)
2 = 250 watt (4U, 6U or Fixed)
3 = 300 watt (4U/6U, ATX)
4 = 350 watt (6U x 8T, Plug in)
5 = 350 watt (Brick, w/o 3.3V)
6 = 500 watt (Brick, w/o 3.3V)
7 = 300 (4U or 6U, PS2 Hot Swap)
8 = 500 watt (6U x 4T, Plug in)
9 = 750 watt (Brick, w/o 3.3V)
A = 250 watt (Brick, w/ 3.3V)
B = 300-500 watt (Brick, w/3.3V)*
C = 500 watt (Brick, w/3.3V)
D = 750 watt (Brick, w/3.3V)
E = 900 watt (2 x Brick, w/3.3V)
F = 1000 watt (Brick, w/ 3.3V)*
G = 1200 watt (Brick, w/ 3.3V)*
H = 1400 watt (Brick, w/3.3V)*
X = Not installed

❑ SHIELDING LEVEL
2 = Level 2
4 = MIL-STD-461
X = Not installed