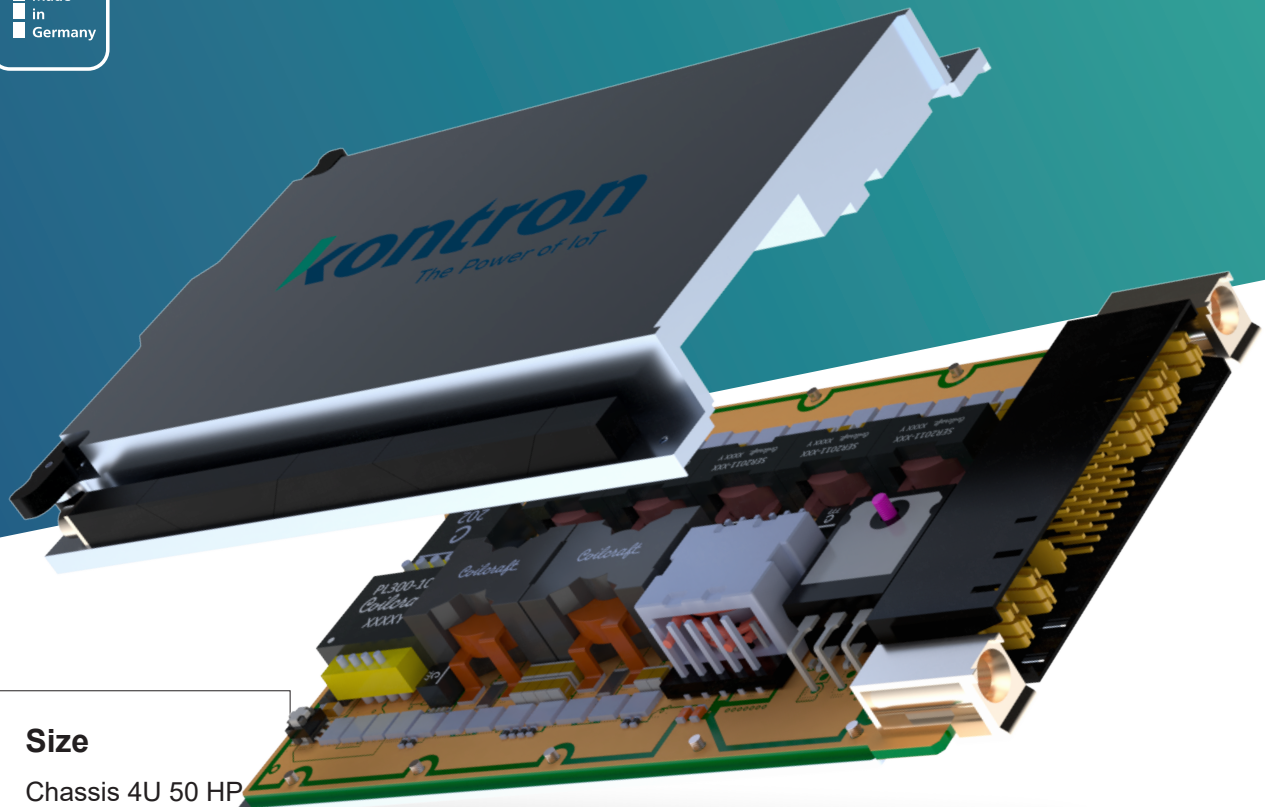


D575.00720

cPCI Serial 4U 32HP 4 Slots

Made
in
Germany



Size

Chassis 4U 50 HP

Backplane

Slots Full Mesh or
Profile number

Fan

Air cooling

Power Supply

Plug-in or ATX &
Watt AC

Vita

Ceck

CompactPCI 4U 32HP 4 Slots

The Hartmann CompactPCI 4U system platform provides an intelligent, practical packaging solution for high-performance processors. The versatile rack mount or desktop model provides a 4 slot 3.3 or 5V I/O 3U cPCI backplane for vertical mounting of boards.

System is designed with enhanced EMC features. Bottom mount fan tray. Rugged yet stylish chassis conforms to mechanical standards IEEE 1101.1 and 1101.10/11 and IEC 60297-3-101, -102, -103.

› Compliance

- › PICMG CompactPCI standard for industrial computing
- › Conforms to IEEE 1101.1 and IEEE 1101.10/11
- › Meets IEC 60297-3-101, -102, and -103 mechanical standards
- › Metric connectors designed to IEC 1076 specification

› Power & Efficiency

- › Supports 32-bit and 64-bit PCI signaling and protocols
- › Compatible with passive backplanes and active bridges for multi-segment configurations

› Protection Features

- › Enhanced EMC design for minimized interface
- › Proper grounding ensured by extended connector pins during insertion and removal

› Management & Control

- › Optional shelf management for voltage and temperature monitoring
- › Intelligent fan trays with multi-point temperature and fan-speed regulation

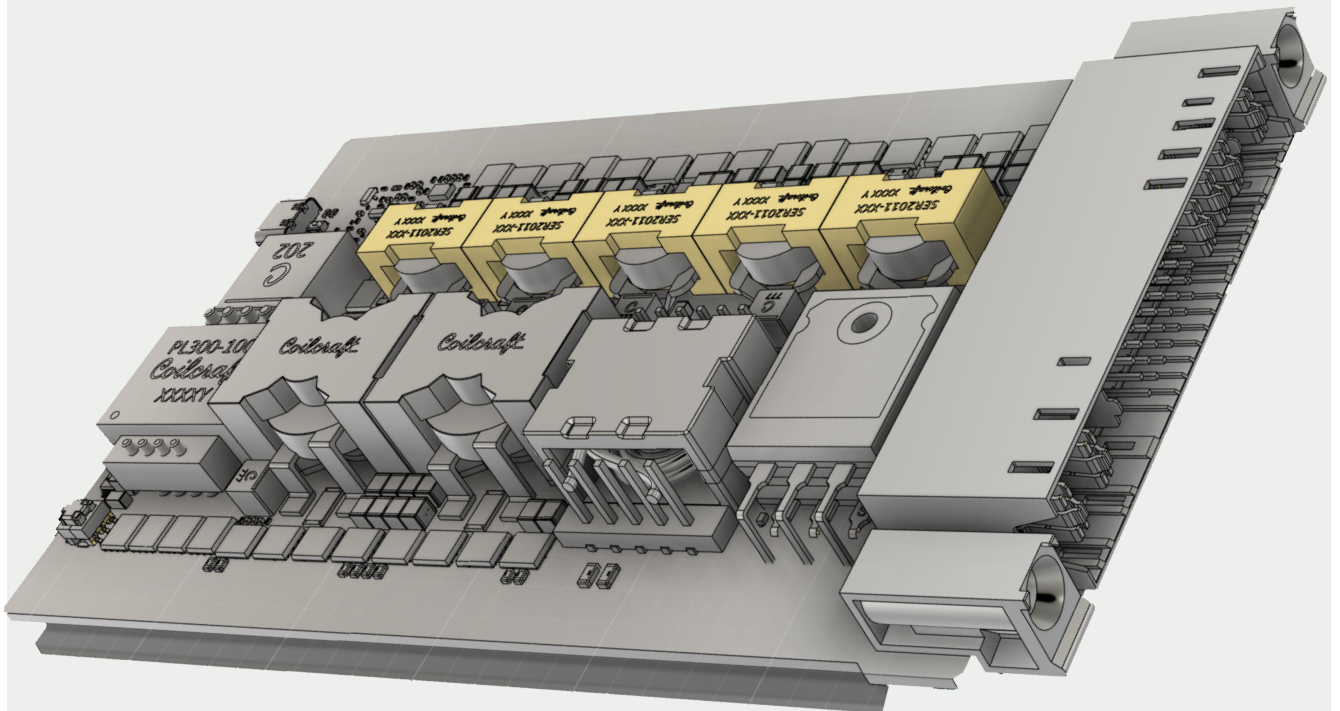
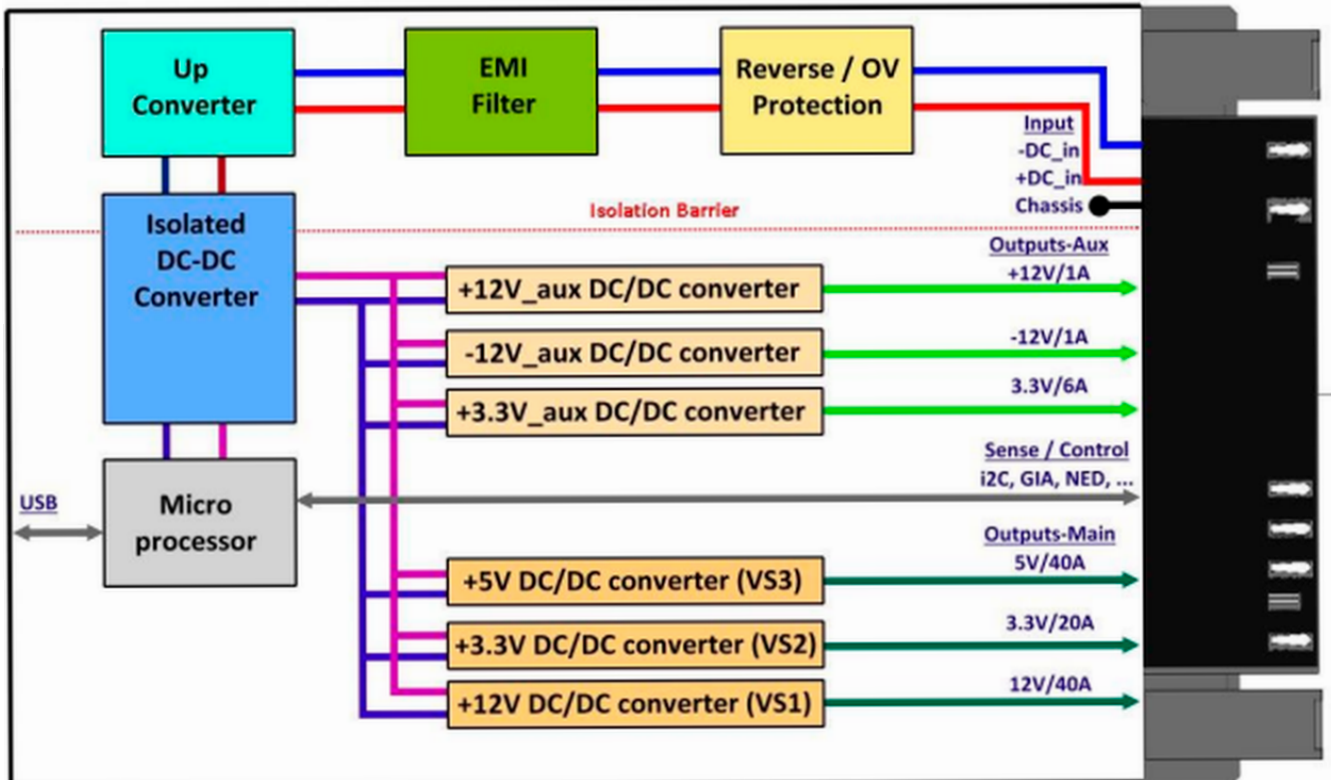
› Design & Components

- › No liquid / wet / aluminum electrolytic capacitors

› Mechanical Dimensions

- › 100.0 mm x 168.5 mm x 19.56 mm (3.94 in x 6.63 in x 0.97 in)





Article	Ordering Code	Description
VPX360DMA	VPX360DMA	600W 3U VITA 62 VPX power supply Standard Version, 28V key, MIL-STD-461, -704,-1275 compliant, with standard acrylic conformal coating
VPX360EMA	VPX360EMA	600W 3U VITA 62 VPX power supply Standard Version, 48V key, MIL-STD-461, -704,-1275 compliant, with standard acrylic conformal coating
VPX360DMS	VPX360DMS	600W 3U VITA 62 SOSA aligned VPX power supply, 28V key, MIL-STD-461, -704, 1275, compliant, with standard acrylic conformal coating (coming soon)

Technical Information

Mounting	Panel-Mount
Backplane	4 slot, 3U, 3.3V or 5V I/O, 32 bit/33 MHz, system slot right with ATX connector
Fan Tray	fixed
no. Of Fans	1, (12V, 120mm, 120CFM, 48dB(A))
Airflow	Bottom to top
Power Supply Type	180W ATX
Power Input	100 - 240VAC, 47-63Hz
No. Of Supplies	1
Output Voltages	3.3V112A, 5vVI14A, +12V114A, -12V10.3A, minimum load: 12V/0.1A
Power Supply Connector	Front side with switch
Chassis Height	4U
Chassis Width	32HP
Chassis Depth	254.4mm
IEEE	1101.1 and 1101.10/11
IEC	60297-3-101, -102, -103
Military Shipboard	MIL-STD-810F: 514.5C-15 (vibration)
Military Highway	MIL-STD-810F :514
Railway	EN 50155-EN 1373 class 1 B, rolling stock (shock/vibration)

Technical Information

Maximum Internal Working Temperatures	125 °C
Temperature Protection Sensing Point (internal)	125 °C (Outputs disable when internal PCB temperature exceeds threshold)
Maximum Currents 12V / 3V3 / 5V	see tables in "variants" for different power configurations
Fixed Switching Frequencies 12V / 3V3 / 5V	520 kHz / 520 kHz / 520 kHz
Peak Efficiencies 12V / 3V3 / 5V	93% / 82% / 90%
Max. Output Ripple and Noise: 12V / 3V3 / 5V	< 120 mVpp / < 50 mVpp / < 50 mVpp (worst case)
(0-20 MHz Bandwidth)	< 30 mVpp / < 25 mVpp / < 25 mVpp (typical)
Line Regulation: 12V / 3V3 / 5V.	< 10 mV / 10 mV / 50 mV
Vin=Vin,min to Vin,max, Io and Tc fixed	< 0.1%
Load Regulation: 12V / 3V3 / 5V	60 mV / 50 mV / 10 mV
Overvoltage Protection +/- 12V / 3V3 / 5V: Maximum Output Voltage (Sense Lines Open)	12.1 V / 3.4 V / 5.2 V
Load Transient Recovery Time (no load to full load change condition)	1 ms
Maximum Current	1 A / 1 A / 4 A
Load Dependent Switching Frequency	300 Hz ... 600 kHz
Efficiency	60% ... 80%
Max. Output Ripple and Noise (0-20 MHz Bandwidth)	
Load Transient Recovery Time (no load to full load change condition)	1 ms
MIL Standard Compliance	as per VITA 62 specification
MIL-STD-461F (EMI) Compliance	Designed (to be tested) in compliance with sections CE102, CS101, CS114, CS115, CS116. See user manual for more details.
MIL-STD-704F Compliance	Designed (to be tested) in compliance for normal transients (LDC105), abnormal transients (LDC302) and distortion spectrum (LDC103). External hold-up circuit optional. See user manual for more details.