

# System Platforms

- **AdvancedTCA**
- **cPSB**
- **cPCI**
- **VME**
- **VME64x**
- **VXI**



**PRODUCTION FACILITIES**
**ABOUT US**


Germany



Switzerland



USA

Elma is a worldwide operating company with factories and sales offices in Switzerland, Germany, USA, England, France and Israel.

We are a specialist in the design and manufacturing of custom and standard System Platforms. Our standard product portfolio includes CompactPCI, Switched Fabric Architectures, AdvancedTCA, VME, VME64x, ATR and Rugged COTS System Platforms.

Our application engineers can develop custom solutions to meet your specifications, from initial concept to finished product. These designs serve a wide array of industries including, but not limited to, aerospace, military, industrial automation, telecommunications, medical and high performance computers.

**OVERVIEW OF TRENEW PRODUCTS**

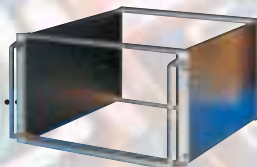
Elma offers also an extensive line of Backplanes, enclosures and chassis for 19" rack mount, IPC Enclosures and Accessories, front panels, handles, rotary switches and encoders.

Just visit our homepage [www.elma.com](http://www.elma.com) to get an overview of all Elma products.

Rotary Components



Enclosures & Components



Backplanes



System Platforms



# Capabilities

By providing in-house design, manufacturing, assembly and testing we provide a "full service" for all packaging solutions.



In order to satisfy all the needs of our customers we have invested heavily into the latest 'state of the art' machinery. Our highly qualified personnel are continually trained in the latest techniques to meet the demands of new me-

thods and processes. Due to our wide range of manufacturing techniques we can offer solutions to most applications under one roof.

**Competent advice:**

Our experience is at your disposal from the concept to mass production.

**Individual development:**

Benefit from our design which is networked worldwide with state-of-the-art CAD tools.

**Highly modern manufacturing:**

Advanced production equipment ensures you top quality standards.

**System Platform assembling centre:**

Time-to-market prototypes and serial production.

**Quality assurance:**

Complete mechanical and electronic test.

# Table of contents

Products & Services.....	Page	2
Capabilities .....	Page	3
Customer benefit .....	Page	4
Custom Systems.....	Page	6
cPCI 1U.....	Page	8
cPCI2U.....	Page	10
cPCI 4U horizontal (pluggable) .....	Page	12
cPCI 4U horizontal (ATX) .....	Page	14
cPCI 4U vertical.....	Page	16
cPCI 7U.....	Page	18
cPCI 9U.....	Page	20
cPSB 2.16 9U.....	Page	22
cPCI Minitower .....	Page	24
VME 4U .....	Page	26
VME 7U .....	Page	28
VME 9U .....	Page	30
VME Minitower.....	Page	32
VME64x 4U.....	Page	34
VME64x 7U.....	Page	36
VME64x 9U .....	Page	38
VME64x 11U.....	Page	40
VXI 8U.....	Page	42
AdvancedTCA 12U.....	Page	44
Overview of Catalogs.....	Page	46

The custom systems shown on the following two pages represent just a small selection of our range.

Trenew is a global leader in designing and manufacturing customised systems with an experience of over 10 years. With our innovative ideas we support you to find

the best solution in fields of ISA/PCI, Compact PCI, AdvancedTC™, VME, VME64x or switched fabric architectures.

Just contact us to unify our strengths.

## APPLICATION FOR REALTIME SIMULATION AND SIGNAL PROCESSING

- EMC integrated system 7U 84HP 470mm deep
- 13 Slot VME64x J1 custom specific backplane
- 10 Slot VXI monolithic custom specific backplane
- Card depth 360mm for VXI & 160mm for VME64x
- Ventilation vertical
- AC/DC 1000W power supply
- 3 fans, temperature controlled by a system monitor



## APPLICATION FOR CLIMATIC DIAGNOSTIC SYSTEM

- Integrated system 4U 84HP 230mm deep
- Vehicle based application
- 18 slot custom specific backplane
- Card depth 160mm for 3U cards
- DC/DC 50W pluggable power supply
- Equipped with custom cards



## APPLICATION FOR NON-DESTRUCTIVE MATERIAL TEST

- EMC integrated system 10U 84HP 423mm deep
- 14 slot custom specific VME64x backplane
- Card depth 280mm for 6U cards, 100mm rear I/O
- Ventilation from the front bottom via the card cage to the top rear
- AC/DC 600W power supply
- 3 fans, temperature controlled



## APPLICATION FOR MILITARY REQUIREMENTS OF FIGHTING VEHICLE ON LAND

- According to MIL-STD-461D (EMC), - 810E and -167 (shock and vibration)
- 15 slot VME64x Backplane
- 4x Fixed - mounted HH Drive Options
- 2x Shock - isolated HH Drive Options



## APPLICATION FOR VIDEO PROJECTION CONTROL

- EMC IPC 6U 84HP 490mm deep
- Space for a 20 slot PCI mother board
- Ventilation from the front to the rear
- AC/DC 800W pluggable power supply
- 3 fans including filter mat



## DEVELOPMENT PLATFORM FOR RADIO SIGNAL RECEIVER

- EMC integrated system 8U 84HP 500mm deep
- 2 x CPCI 3HE 7Slot backplane + Bridge and
- 1 x 7 Slot CPCI 1:1 custom specific backplane
- Card depth 160mm for 6U cards
- AC/DC 400W power supply
- 3 fans, temperature controlled by a system monitor
- System include FD, HD, DVD, transition board,
- 12.1" -TFT-Display, Keyboard with drawer and special cabling



**FEATURES**

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation horizontal (side to side)
- 2 slot backplane 6U R3.0, system slot left
- Power supply ATX 200W
- On / off-switch on the front
- Three fans
- Drive holder for 2 x 2 1/2" HDD
- CompactPCI 6U with 2 slots 80mm I/O socket



Dimension:	Height:	1 U
	Width:	84 HP
	Depth:	305 mm

**ORDERCODE-INSERT APPROPRIATE DIGIT**

1	8	4	-	0	2	2	0	0	C	2
---	---	---	---	---	---	---	---	---	---	---

**AVAILABLE SLOTS**
**CPCI R3.0 Backplane 6U, System Slot left, 64 bit, 33 MHz**

No. of slot	2
-------------	---

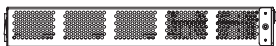
## MECHANICAL DESIGN

## SPECIFICATIONS

## FRONT VIEW (AIR FLOW)



## SIDE VIEW



## REAR VIEW



## FAN

- Mode permanent
- Dimension 40 x 40 x 20 mm
- Nominal voltage 12 V
- Input power 1,32 W
- Air flow, free air 16,2 m<sup>3</sup>/h
- Noise 33 dB

## POWER SUPPLY 200W (ATX)

- Output power 200 W
- Output Voltages 3,3V/15A; 5V/25A; 12V/13A; -12V/1A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B
- Approvals UL 1950, CSA C22.2 No 950  
TÜV EN 60950; IEC 100-3-3 Classic

## SCOPE OF SUPPLY

High quality 19" rackmount chassis platform consisting of black painted sheet steel enclosures, high performance cPCI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

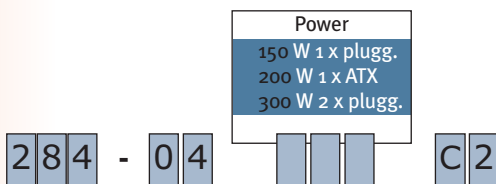
Please note: custom configurations possible.

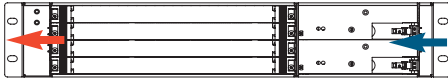
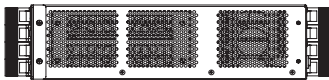
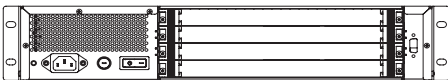
**FEATURES**

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation horizontal (side to side)
- Integrated LED
- 4 slot backplane 6U R3.0, system slot left
- Power supplies ATX 200W (fixed-mount) or pluggable PSU's with redundant hot swap options
- On / off-switch on the rear
- Three fans
- ATX version: Drive holder for 1 x 3 1/2" HDD and 1 x CD-ROM (slimline)
- Pluggable version: no devices
- CompactPCI 6U with 4 slots 80mm I/O socket



Dimension:            Height:            2 U  
                              Width:             84 HP  
                              Depth:            305 mm

**ORDERCODE-INSERT APPROPRIATE DIGIT**

**AVAILABLE SLOTS**
**CPCI R3.0 Backplane 6U, System Slot left, 64 bit, 33 MHz**
**No. of slot**
**4**

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW (AIR FLOW)**

**SIDE VIEW**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 80 x 80 x 25 mm
- Nominal voltage 12 V
- Input power 2,76 W
- Air flow, free air 66 m<sup>3</sup>/h
- Noise 34 dB

**POWER SUPPLY 200W (ATX)**

- Output power 200 W
- Output Voltages 3,3V/15A; 5V/25A; 12V/13A; -12V/1A
- Input voltage 100-240VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B
- Approvals UL 60950, CSA C22.2 No 950  
TÜV EN 60950; IEC 100-3-2 Class D

**POWER SUPPLY 150W (3U 8HE PLUGGABLE)**

- Output power 150 W
- Output Voltages 3,3V/36A; 5V/25A; 12V/3A; -12V/0,5A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55002 Class B; CISPR 22 Class B
- Approvals UL1950; CSA 22.2 # 234; IEC950;  
EN61000-3-2 (PFC); TÜV EN60950; CE

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of black painted sheet steel enclosures, high performance cPCI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

# cPCI 4U HORIZONTAL (PLUGGABLE)

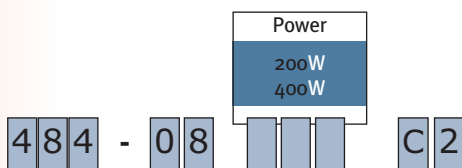
## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation horizontal (side to side)
- 8 slot backplane 6U R3.0, system slot right
- Power supply 200W with redundant hot swap option
- On / off-switch on the rear
- Four fans in 80 x 80 x 20mm and three 40 x 40 x 15mm in a 4U cassette include air filter
- Drive holder for 2 x 3 1/2" modules (2 x 200W)
- Drive holder for 3 x 3 1/2" modules (200W)
- CompactPCI 6U with 80mm I/O socket



Dimension:            Height: 4 U  
                              Width: 84 HP  
                              Depth: 305 mm

## ORDERCODE-INSERT APPROPRIATE DIGIT



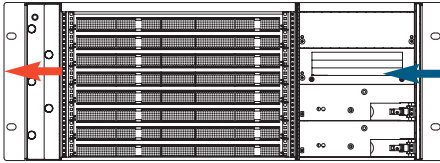
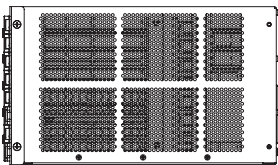
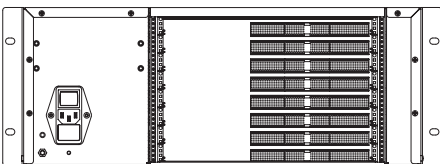
## AVAILABLE SLOTS

**CPCI R3.0 Backplane 6U, System Slot right, 64 bit, 33 MHz**

80962-00X-6X00

No. of slot

8

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW (AIR FLOW)**

**SIDE VIEW**

**REAR VIEW**

**FAN (TYPE I)**

- Mode permanent
- Dimension 40 x 40 x 15 mm
- Nominal voltage 12 V
- Input power 1 W
- Air flow, free air 15,6 m<sup>3</sup>/h
- Noise 39 dB

**FAN (TYPE II)**

- Mode permanent
- Dimension 80 x 80 x 20 mm
- Nominal voltage 12 V
- Input power 3,4 W
- Air flow, free air 75,0 m<sup>3</sup>/h
- Noise 42 dB

**POWER SUPPLY 200W (3U 8HE PLUGGABLE)**

- Output power 200 W
- Output voltage 3,3/36A; 5V/25A; 12V/3A; -12V/0,5A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B, CISPR 22 Class B
- Approvals UL1950, CSA 22.2 #234 IEC 950; EN61000-3-2 (PFC) TÜV EN60950; CE

**SCOPE OF SUPPLY**

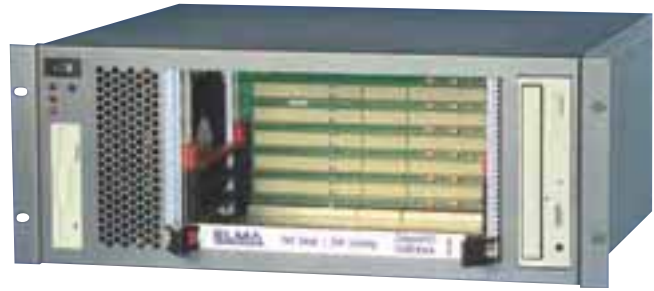
High quality 19" rackmount chassis platform consisting of black painted sheet steel enclosures, high performance cPCI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

# cPCI 4U HORIZONTAL (ATX)

## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation front, via card cage to rear
- Integrated LED
- 2 - 6 slot backplane 6U R3.0, system slot right
- Power supply ATX 320W
- On / off-switch on the front
- One fan
- Drive holder for 2 x 3 1/2" and 1 x 5 1/4" modules
- CompactPCI 6U with 80mm I/O socket



Dimension:            Height:        4 U  
                          Width:            84 HP  
                          Depth:           361 mm

## ORDERCODE-INSERT APPROPRIATE DIGIT

484 - 

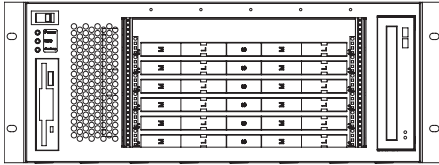
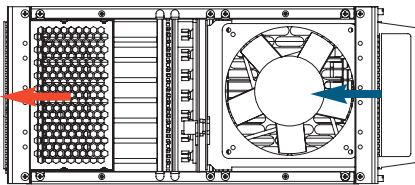
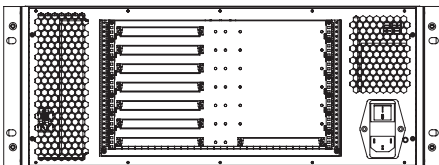
Slots*
2 - 6

 300C2

\* Please check the availability of preferred parts on our homepage

## AVAILABLE SLOTS

cPCI R3.0 Backplane 6U, System Slot right, 64 bit, 33 MHz		80962-00X-6X00			
No. of slot	2	3	4	5	6

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 120 x 120 x 25 mm
- Nominal voltage 12 V
- Input power 6,84 W
- Air flow, free air 156 m<sup>3</sup>/h
- Noise 39 dB

**POWER SUPPLY 320W (ATX)**

- Output power 320 W
- Output Voltages 3,3V/20A; 5V/32A; 12V/11A; -12V/1A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022
- Approvals UL; TÜV; CE; EN

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of black painted sheet steel enclosures, high performance cPCI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

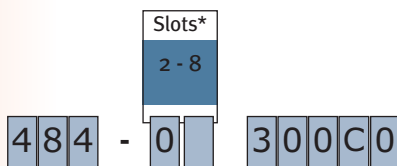
## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 3U cards
- Ventilation vertical
- 2 - 8 slot backplane 3U R3.0, system slot right
- Power supply ATX 300W
- On / off-switch on the front
- Two front handles
- One or two fans
- Drive cassettes for 2 x 3 1/2" and 1 x 5 1/4" modules
- CompactPCI 3U without I/O socket



Dimension:            Height:        4 U  
                          Width:          84 HP  
                          Depth:         292 mm

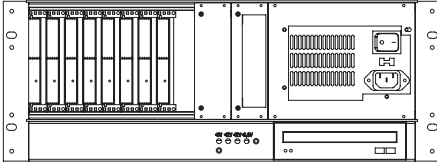
## ORDERCODE-INSERT APPROPRIATE DIGIT



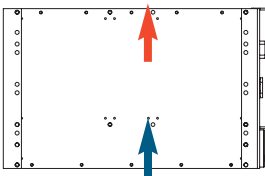
\* Please check the availability of preferred parts on our homepage

## AVAILABLE SLOTS

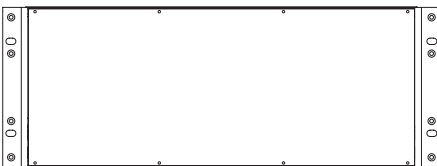
cPCI R3.0 Backplane 3U, System Slot right, 64 bit, 33 MHz		80942-00X-6X00					
No. of slot	2	3	4	5	6	7	8

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**FAN**

- Mode permanent
- Dimension 120 x 120 x 25 mm
- Nominal voltage 12 V
- Input power 8,9 W
- Air flow, free air 156 m<sup>3</sup>/h
- Noise 42 dB

**SIDE VIEW (AIR FLOW)**

**POWER SUPPLY 300W (ATX)**

- Output power 300 W
- Output Voltages 3,3V/28A; 5V/30A; 12V/15A; -12V/0,8A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B
- Approvals EI, CSA, TÜV

**REAR VIEW**

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance cPCI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

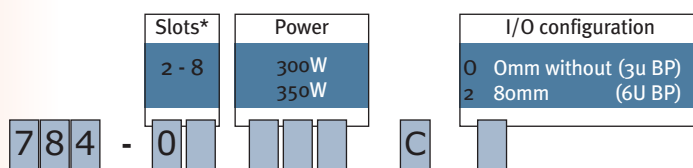
## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation vertical
- Integrated LED for output voltages
- 2 - 8 slot backplane 3U or 6U R3.0, system slot right
- Power supplies ATX 300W or pluggable 350W
- On / off-switch on the front
- Two front handles
- Two fans in a pluggable 1U cassette (front side)
- Drive cassettes for 3 x 3 1/2" and 1 x 5 1/4" modules
- CompactPCI 6U with 80mm I/O socket (option 2)
- CompactPCI 3U without I/O socket (option 0)



Dimension:      Height:      7 U  
                          Width:        84 HP  
                          Depth:        292 mm

## ORDERCODE-INSERT APPROPRIATE DIGIT



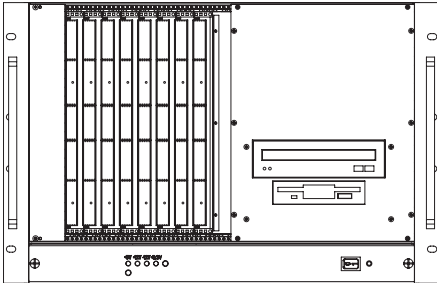
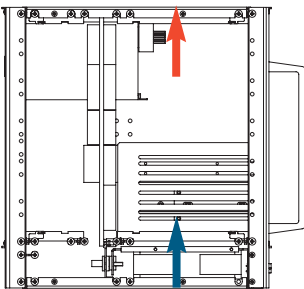
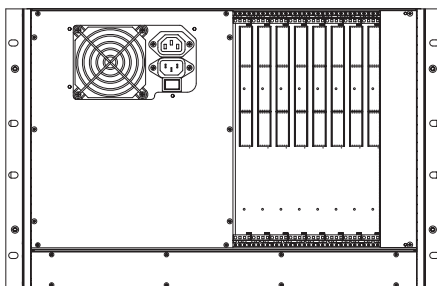
\* Please check the availability of preferred parts on our homepage

## AVAILABLE SLOTS

cPCI R3.0 Backplane 6U, System Slot right, 64 bit, 33 MHz		80962-00X-6X00					
No. of slot	2	3	4	5	6	7	8

cPCI R3.0 Backplane 3U, System Slot right, 64 bit, 33 MHz		80942-00X-6X00					
No. of slot	2	3	4	5	6	7	8

Subject to technical change.

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 119 x 119 x 32mm
- Nominal voltage 12 V
- Input power 5,76 W
- Air flow, free air 169,8 m<sup>3</sup>/h
- Noise 44 dB

**POWER SUPPLY 300W (ATX)**

- Output power 300 W
- Output Voltages 3,3V/28A; 5V/30A; 12V/15A; -12V/0,8A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B
- Approvals UL, CSA, VDE, TÜV, CE

**POWER SUPPLY 350W (6U 8HE PLUGGABLE)**

- Output power 350 W
- Output Voltages 3,3V/80A; 5V/50A; 12V/7A; -12V/1A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI VDE/CISPR22 Class B
- Approvals UL, cUL, TÜV, CE

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance cPCI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

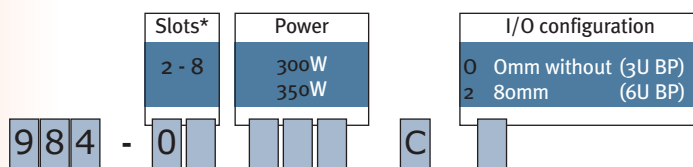
## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation from the front bottom via the card cage to the top rear
- Integrated LED for output voltages
- 2 - 8 slot backplane 3U or 6U R3.0, system slot right
- Power supplies ATX 300W or pluggable 350W
- On / off-switch on the front
- Two front handles
- Two fans in a pluggable 2U cassette (front side) including air filter
- Drive cassettes for 3 x 3 1/2" and 1 x 5 1/4" modules
- CompactPCI 6U with 80mm I/O socket (option 2)
- CompactPCI 3U without I/O socket (option 0)



Dimension:      Height:      9 U  
                          Width:        84 HP  
                          Depth:       292mm

## ORDERCODE-INSERT APPROPRIATE DIGIT



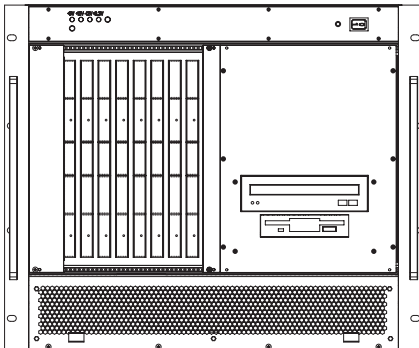
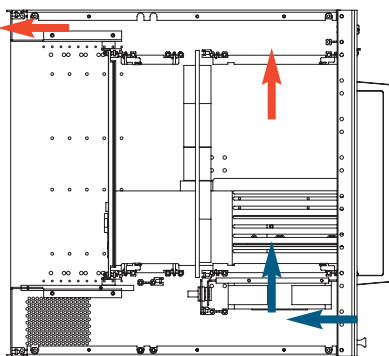
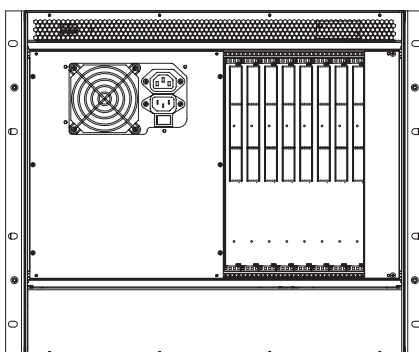
\* Please check the availability of preferred parts on our homepage

## AVAILABLE SLOTS

CPCI R3.0 Backplane 6U, System Slot right, 64 bit, 33 MHz		80962-00x-6x00					
No. of slot	2	3	4	5	6	7	8

CPCI R3.0 Backplane 3U, System Slot right, 64 bit, 33 MHz		80942-00x-6x00					
No. of slot	2	3	4	5	6	7	8

Subject to technical change.

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 119 x 119 x 32mm
- Nominal voltage 12 V
- Input power 5,76 W
- Air flow, free air 169,8 m<sup>3</sup>/h
- Noise 44 dB

**POWER SUPPLY 300W (ATX)**

- Output power 300 W
- Output Voltages 3,3V/28A; 5V/30A; 12V/15A; -12V/0,8A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B
- Approvals UL, CSA, VDE, TÜV, CE

**POWER SUPPLY 350W (6U 8HE PLUGGABLE)**

- Output power 350 W
- Output Voltages 3,3V/80A; 5V/50A; 12V/7A; -12V/1A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI VDE/CISPR22 Class B
- Approvals UL, cUL, TÜV, CE

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance cPCI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

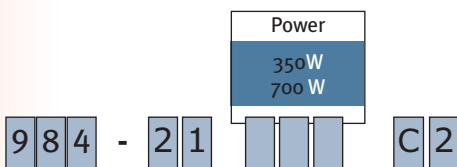
## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation from the front bottom via the card cage to the top rear
- Integrated LED for output voltages
- 21 slots: 16 cPCI slots + 1 spare slot + 4 slots for power supply
- 14 node slots (1 - 14) and two standard fabric slots (15 & 16) 1000Mbps full-duplex ethernet connection between fabric and node slots
- Power supplies pluggable 350W or 2 x 350W
- On / off-switch on the front
- Two front handles
- Three fans in a pluggable 2U cassette (front side) including air filter



Dimension:            Height:        9 U  
                              Width:         84 HP  
                              Depth:        292mm

## ORDERCODE-INSERT APPROPRIATE DIGIT



\* Please check the availability of preferred parts on our homepage

## AVAILABLE SLOTS

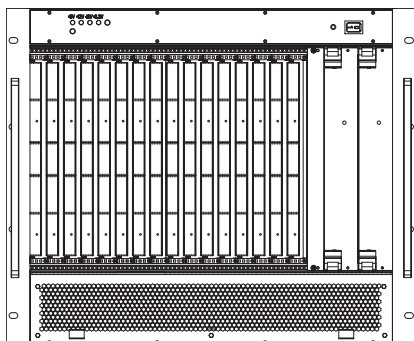
### PICMG 2.16 cPCI Packet Switching Development Backplane

No. of slot	21
-------------	----

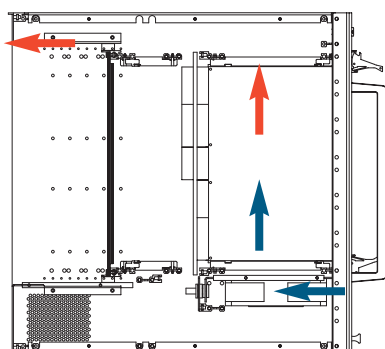
## MECHANICAL DESIGN

## SPECIFICATIONS

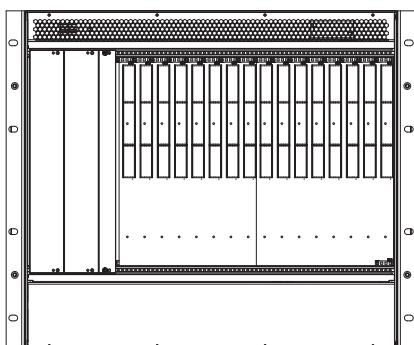
## FRONT VIEW



## SIDE VIEW (AIR FLOW)



## REAR VIEW



## FAN

- Mode permanent
- Dimension 119 x 119 x 32mm
- Nominal voltage 12 V
- Input power 5,76 W
- Air flow, free air 169,8 m<sup>3</sup>/h
- Noise 44 dB

## POWER SUPPLY 350W (6U 8HP PLUGGABLE)

- Output power 350 W
- Output Voltages 3,3V/80A; 5V/50A; 12V/7A; -
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI VDE/CISPR22 Class B
- Approvals UL, cUL, TÜV, CE

## SCOPE OF SUPPLY

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance cPCI backplane power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

## FEATURES

- EMC integrated VMEbus system in PC case
- Card depth 160mm for 6U cards
- Vertical ventilation
- Front LED display
- 6 slot cPCI backplane
- Power supply ATX 300W
- On / off-switch on the front
- Power supply on the rear
- Assembly possibility for drives
- 2 x 5 1/4 " and 2 x 3 1/2" modules
- Compact PCI 3U, option A for 6U cards
- Compact PCI 3U, option B for 3U cards

Dimension:            Height:        11 U  
                          Width:         37 HP  
                          Depth:        420 mm



## ORDERCODE-INSERT APPROPRIATE DIGIT

Board configuration	
A	6U board
B	3U board

1 1 3 7 - 0 6 3 0 0 C

## AVAILABLE SLOTS

CPCI R3.0 Backplane 3U, System Slot right, 64 bit, 33 MHz

80942-00X-6X00

No. of slot

6

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**REAR VIEW 3U CARDS**

**REAR VIEW 6U CARDS**

**FAN**

- Mode permanent
- Dimension 119 x 119 x 25mm
- Nominal voltage 12 V
- Input power 3,2 W
- Air flow, free air 140,00 m<sup>3</sup>/h
- Noise 38 dB

**POWER SUPPLY 300W (ATX)**

- Output power 300 W
- Output Voltages 3,3V/14A; 5V/30A; 12V/10A; -12V/0,5A
- Input voltage 230 VAC
- Frequency 50 - 60 Hz
- RFI, EMI FCC Class B, CISPR22-B, EMC
- Approvals UL, CSA, TÜV, VDE, NEMKO, DEMKO, SEMKO, CB

**SCOPE OF SUPPLY**

High quality chassis platform consisting of grey painted sheet steel enclosures, high performance cPCI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

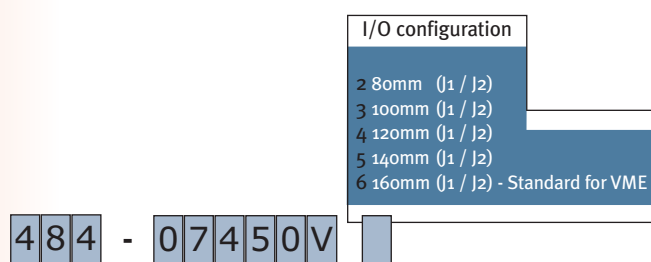
## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation front, via card cage to rear
- Integrated LED for output voltages
- 7 slot backplane
- Power supply 450W
- On / off-switch on the front
- Two front handles
- One fan in a pluggable 4 U cassette (front side)
- VME Monolithic Classic,  
7 slot 6 U 160mm I/O sockets



Dimension:      Height: 4 U  
                      Width: 84 HP  
                      Depth: 371 mm

## ORDERCODE-INSERT APPROPRIATE DIGIT

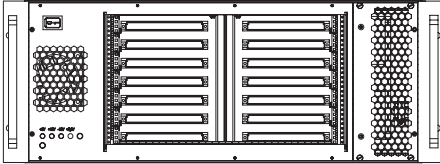
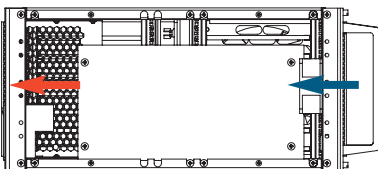
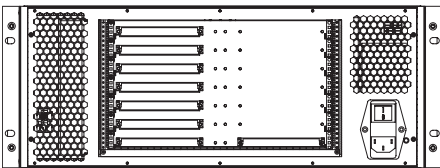


## AVAILABLE SLOTS

VME Monolithic      30510-207-0000

No. of slot

7

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 138 x 35mm
- Nominal voltage 12 V
- Input power 4,5 W
- Air flow, free air 110,00 m<sup>3</sup>/h
- Noise 57 dB

**POWER SUPPLY 450W**

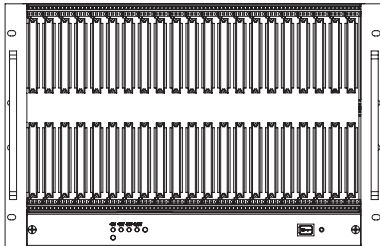
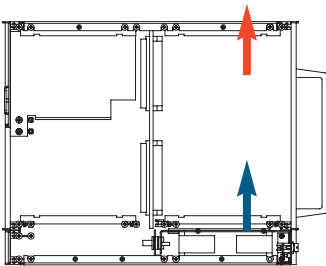
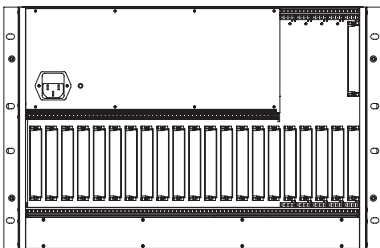
- Output power 450 W
- Output Voltages 5V/60A; 12V/5A;-12V/2A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA,EN, CE EN61000-3-2 (PFC)

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance Monolithic VME backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.



**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 119 x 119 x 32mm
- Nominal voltage 12 V
- Input power 5,76 W
- Air flow, free air 169,8 m<sup>3</sup>/h
- Noise 44 dB

**POWER SUPPLY 450W**

- Output power 450 W
- Output Voltages 5V/60A; 12V/5A; -12/2A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**POWER SUPPLY 650W**

- Output power 650 W
- Output Voltages 5V/100A; 12V/6A; -12/4A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance J1 or Monolithic VME backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

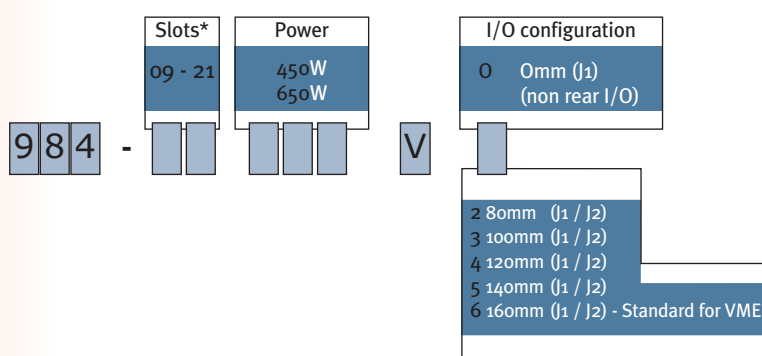
Please note: custom configurations possible.

**FEATURES**

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation from the front bottom via the card cage to the top rear
- Integrated LED for output voltages
- 9 - 21 slot backplane
- Power supplies 450W or 650 W in a pluggable 2U cassette (rear side)
- On / off-switch on the front
- Two front handles
- Two or three fans in a pluggable 2U cassette (front side) including air filter
- VME Monolithic Classic, 21 slots in 6U 160mm I/O sockets possible (option 1-6)
- VME J1 Classic without I/O sockets (option 0)



Dimension:            Height:        9 U  
                          Width:          84 HP  
                          Depth:         400 mm

**ORDERCODE-INSERT APPROPRIATE DIGIT**


\* Please check the availability of preferred parts on our homepage

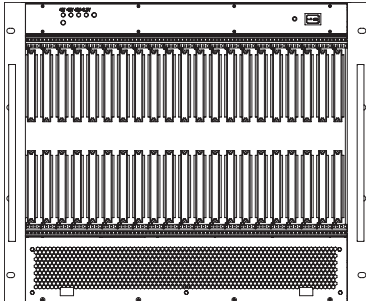
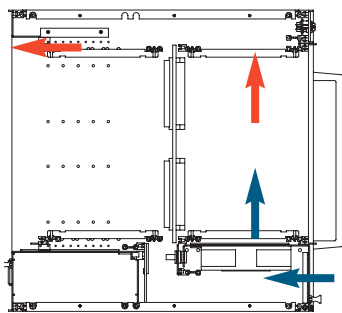
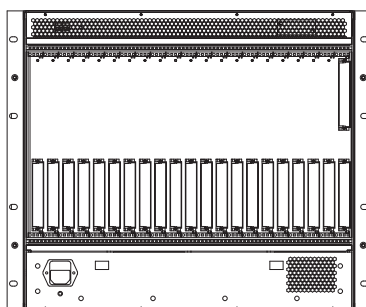
**AVAILABLE SLOTS**

VME MONOLITHIC		30510-2XX-0000									
No. of slot		9	10	12	14	15	16	18	20	21	

VME J1		50510-2XX-0000									
No. of slot		9	10	12	14	15	16	18	20	21	

Subject to technical change.

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 119 x 119 x 32mm
- Nominal voltage 12 V
- Input power 5,76 W
- Air flow, free air 169,8 m<sup>3</sup>/h
- Noise 44 dB

**POWER SUPPLY 450W**

- Output power 450 W
- Output Voltages 5V/60A; 12V/5A; -12/2A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**POWER SUPPLY 650W**

- Output power 650 W
- Output Voltages 5V/100A; 12V/6A; -12/4A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance J1 or Monolithic VME backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

# VME MINITOWER

## FEATURES

- EMC integrated VMEbus system in PC case
- Card depth 160mm for 6U cards
- Vertical ventilation
- Front LED display
- 6 slot VME Monolithic backplane
- Power supply ATX 300W
- On / off-switch on the front
- Power supply on the rear
- Assembly possibility for drives
- 2 x 5 1/4 " and 2 x 3 1/2" modules

Dimension:	Height:	11 U
	Width:	37 HP
	Depth:	420 mm



## ORDERCODE-INSERT APPROPRIATE DIGIT

1137 - 06300V0

## AVAILABLE SLOTS

VME MONOLITHIC	30510-206-0000
No. of slot	6

## MECHANICAL DESIGN

## SPECIFICATIONS

## REAR VIEW



## FAN

- Mode permanent
- Dimension 119 x 119 x 25mm
- Nominal voltage 12 V
- Input power 3,2 W
- Air flow, free air 140,00 m<sup>3</sup>/h
- Noise 38 dB

## POWER SUPPLY 300W (ATX)

- Output power 300 W
- Output Voltages 3,3V/14A; 5V/30A; 12V/10A; -12V/0,5A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI FCC Class B, CISPR22-B, EMC
- Approvals UL, CSA, TÜV, VDE, NEMKO, DEMKO, SEMKO, CB

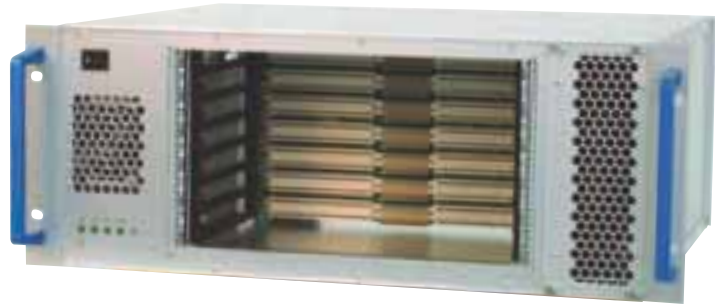
## SCOPE OF SUPPLY

High quality chassis platform consisting of grey painted sheet steel enclosures, high performance Monolithic VME backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

# VME64X 4U

## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation front, via card cage to rear
- Integrated LED for output voltages
- 7 slot backplane
- Power supply 450W
- On / off-switch on the front
- Two front handles
- One fan in a pluggable 4U cassette (front side)
- VME 64x 7U with PO,  
7 slot 160mm I/O sockets



Dimension:      Height: 4 U  
                      Width: 84 HP  
                      Depth: 371 mm

## ORDERCODE-INSERT APPROPRIATE DIGIT

I/O configuration	
2	80mm with PO
3	100mm with PO
4	120mm with PO
5	140mm with PO
6	160mm with PO

484 - 07450X

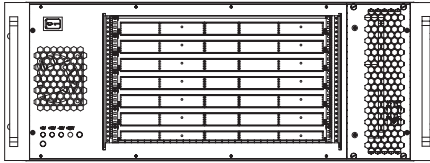
## AVAILABLE SLOTS

VMEbus 64x Backplane 7U with PO assembled

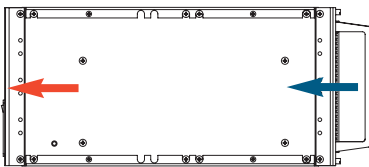
32210-207-0060

No. of slot

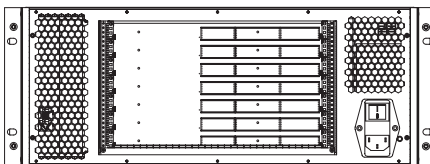
7

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**FAN**

- Mode permanent
- Dimension 138 x 35mm
- Nominal voltage 12 V
- Input power 4,5 W
- Air flow, free air 110,00 m<sup>3</sup>/h
- Noise 57 dB

**SIDE VIEW (AIR FLOW)**

**POWER SUPPLY 450W**

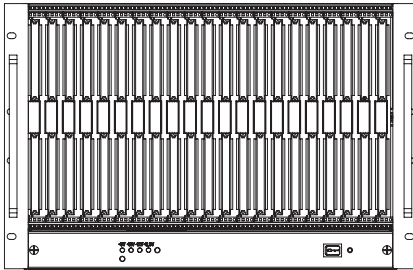
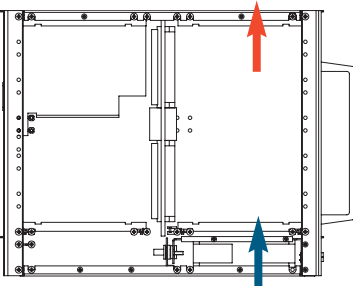
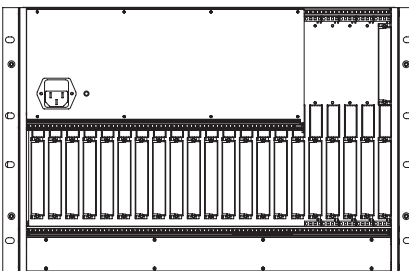
- Output power 450 W
- Output Voltages 3,3V/25A; 5V/35A; 12V/6A; -12V/3A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**REAR VIEW**

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance VME 64x backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.



**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 119 x 119 x 32mm
- Nominal voltage 12 V
- Input power 5,76 W
- Air flow, free air 169,8 m<sup>3</sup>/h
- Noise 44 dB

**POWER SUPPLY 450W**

- Output power 450 W
- Output Voltages 3,3V/25A; 5V/35A; 12V/6A; -12V/3A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**POWER SUPPLY 650W**

- Output power 650 W
- Output Voltages 3,3V/35A; 5V/60A; 12V/10A; -12V/4A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance VME 64x backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

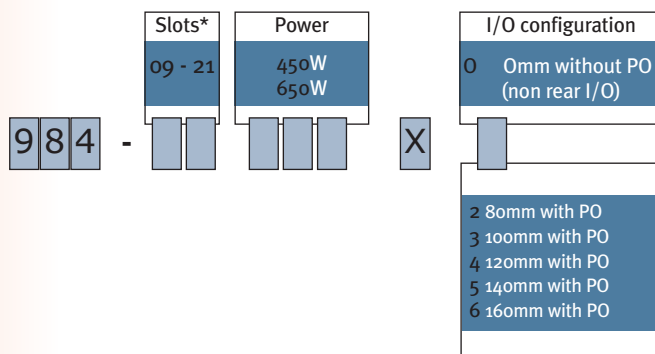
## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation from the front bottom via the card cage to the top rear
- Integrated LED for output voltages
- 9 - 21 slot backplane
- Power supplies 450W or 650 W in a pluggable 2U cassette (rear side)
- On / off-switch on the front
- Two front handles
- Two or three fans in a pluggable 2U cassette (front side) including air filter
- VME 64x 6U, 21 slots in 6U 160mm I/O sockets possible (option 1-6)
- VME 64x 6U without Po, no I/O sockets (option o)



Dimension:            Height:        9 U  
                          Width:          84 HP  
                          Depth:         400 mm

## ORDERCODE-INSERT APPROPRIATE DIGIT



\* Please check the availability of preferred parts on our homepage

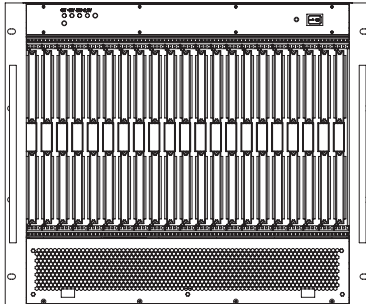
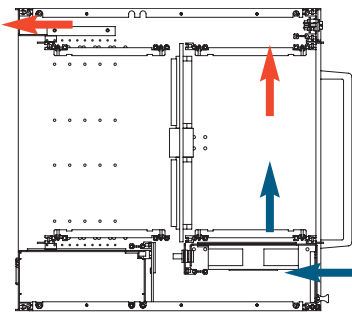
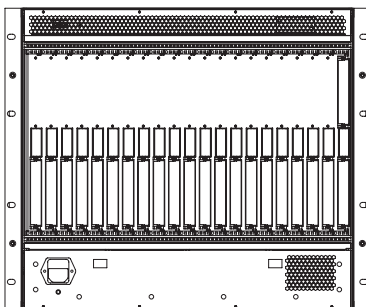
## AVAILABLE SLOTS

VMEbus 64x Backplane with Po assembled							32220-2xx-oB60
No. of slot	9	10	12	16	20	21	

VMEbus 64x Backplane without Po							32120-2xx-ox60
No. of slot	9	10	12	16	20	21	

Subject to technical change.

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 119 x 119 x 32mm
- Nominal voltage 12 V
- Input power 5,76 W
- Air flow, free air 169,8 m<sup>3</sup>/h
- Noise 44 dB

**POWER SUPPLY 450W**

- Output power 450 W
- Output Voltages 3,3V/25A; 5V/35A; 12V/6A; -12V/3A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**POWER SUPPLY 650W**

- Output power 650W
- Output Voltages 3,3V/35A; 5V/60A; 12V/10A; -12V/4A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B (conducted)
- Approvals UL, CSA, EN, CE EN61000-3-2 (PFC)

**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance VME 64x backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

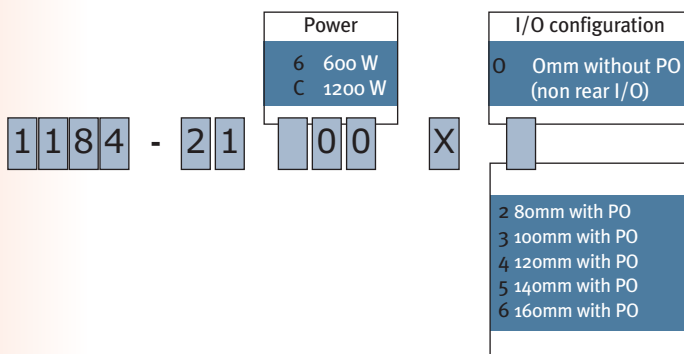
## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 160mm for 6U cards
- Ventilation from the front bottom via the card cage to the top rear
- System monitor with integrated LED display
- 21 slot VME 64x backplane
- Pluggable power supply with 600W or 2 x 600W parallel run
- On / off-switch on the rear
- Power supply on the rear
- Two front handles
- Pluggable fan cassette with radial fans temperature controlled by a system monitor, including air filter
- VME 64x with Po, 21 slots in 6U 160mm I/O sockets possible (option 1-6)
- VME 64x without Po, no I/O sockets (option o)



Dimension:      Height:      11 U  
                          Width:        84 HP  
                          Depth:       371 mm

## ORDERCODE-INSERT APPROPRIATE DIGIT



\* Please check the availability of preferred parts on our homepage

## AVAILABLE SLOTS

**VMEbus 64x Backplane 7U with Po assembled**

No. of slot	21
-------------	----

**VMEbus 64x Backplane 7U without Po**

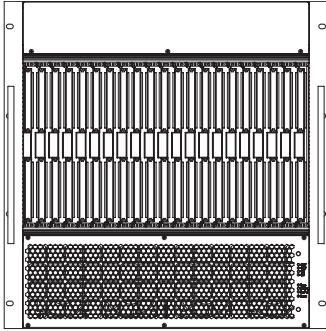
No. of slot	21
-------------	----

Subject to technical change.

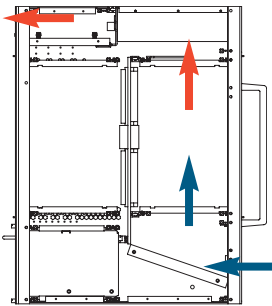
## MECHANICAL DESIGN

## SPECIFICATIONS

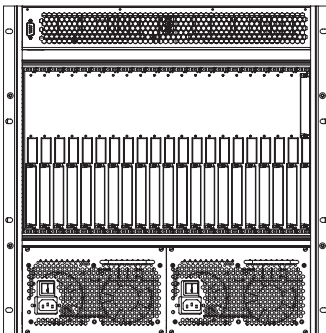
## FRONT VIEW



## SIDE VIEW (AIR FLOW)



## REAR VIEW



## FAN

- Mode permanent
- Dimension 176 x 56mm
- Nominal voltage 12 V
- Input power 18,5 W
- Air flow, free air 240 m<sup>3</sup>/h
- Noise 68 dB

## POWER SUPPLY 600W

- Output power 600 W
- Output Voltages 3,3V/60A; 5V/50A; 12V/10A; -12V/3A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN50081-01 / EN55011 / 55022 Class A
- Approvals CE

## SCOPE OF SUPPLY

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance VME 64x backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

**FEATURES**

- EMC integrated system in 19" rack mount
- Card depth 340mm for 6U modules
- Ventilation from the rear bottom via the card cage to the sides on top
- System monitor with integrated LED display
- 13 slot VXI backplane
- Pluggable power supply cassette with 1000W or 1600W
- On / off-switch on the rear, inhibit on the front
- Power supply on the rear
- Pluggable fan cassette with two radial fans, temperature controlled by a system monitor



Dimension:            Height:        8 U  
                          Width:         84 HP  
                          Depth:        590 mm

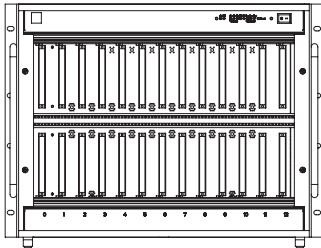
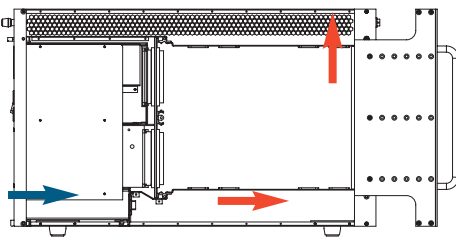
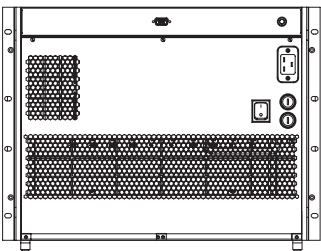
**ORDERCODE-INSERT APPROPRIATE DIGIT**

8	8	4	-	1	3	<table border="1"> <tr><td>Power</td></tr> <tr><td>A 1000W</td></tr> <tr><td>F 1600W</td></tr> </table>	Power	A 1000W	F 1600W	0	0	I	0
Power													
A 1000W													
F 1600W													

\* Please check the availability of preferred parts on our homepage

**AVAILABLE SLOTS**

VXIbus Backplane 6U Size C	35211-213-00
No. of slot	13

**MECHANICAL DESIGN**
**SPECIFICATIONS**
**FRONT VIEW**

**SIDE VIEW (AIR FLOW)**

**REAR VIEW**

**FAN**

- Mode permanent
- Dimension 176 x 56mm
- Nominal voltage 12 V
- Input power 18,5 W
- Air flow, free air 240 m<sup>3</sup>/h
- Noise 68 dB

**POWER SUPPLY 1000W**

- Output power 1000 W
- Output Voltages -2V/10A; 5V/60A; -5,2V/35A; 12V/17A; -12V/10A; 24V/8A; -24V/8A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B
- Approvals UL, CSA, ICE, CE

**POWER SUPPLY 1600W (2x 800W)**

- Output power 2x 800 W
- Output Voltages -2V/35A; 5V/120A; -5,2V/60A; 12V/17A; -12V/10A; 24V/8A; -24V/8A
- Input voltage 100-240 VAC
- Frequency 50 - 60 Hz
- RFI, EMI EN55022 Class B
- Approvals UL, CSA, ICE, CE

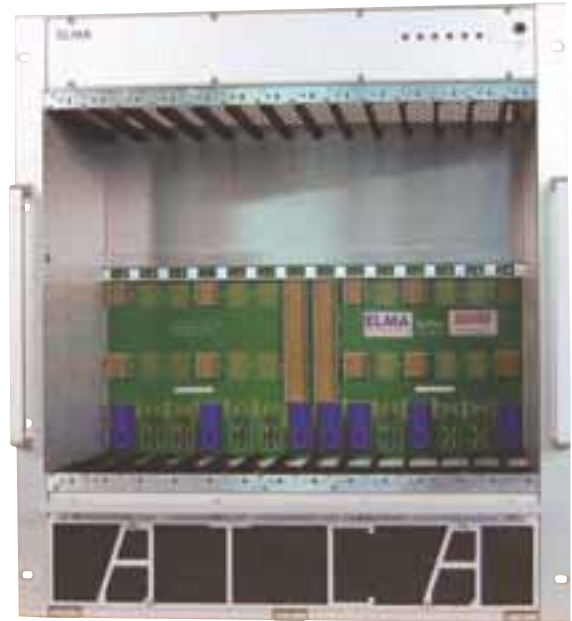
**SCOPE OF SUPPLY**

High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance VXI backplane, power supply, cooling system and AC/DC power components. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

## FEATURES

- EMC integrated system in 19" rack mount
- Card depth 280mm for 8U cards
- Card depth rear I/O 70mm for 8U cards
- Ventilation from the front bottom via the card cage to the top rear
- 3 pluggable fan trays below cards
- Each fan tray with dual fans with Alarm output
- Air flow to dissipate 200W per slot
- Dual 48 V power feeds in the back
- Dual ESD jacks (front and rear)
- ATCA-Backplane 14 slot (2 hub, 12 node slot)
- Base interface configured as a dual star and a dual star 3.1 fabric implementation
- Two front handles



Dimension:           Height: 12 U  
                           Width: 84 HP  
                           Depth: 396 mm

**AdvancedTCA™**

ORDERCODE-INSERT APPROPRIATE DIGIT

1284 - 14000A7

## AVAILABLE SLOTS

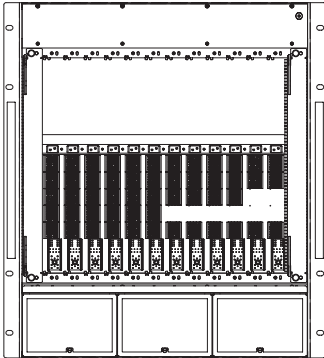
**ATCA-Backplane**

No. of slot           14

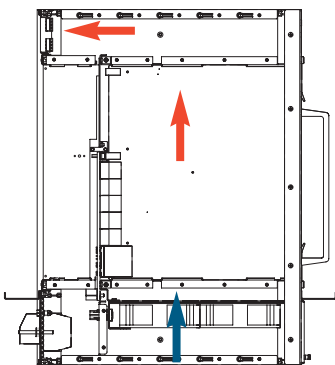
## MECHANICAL DESIGN

## SPECIFICATIONS

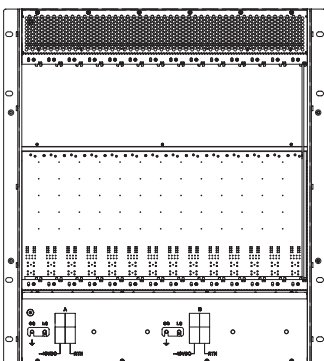
## FRONT VIEW



## SIDE VIEW (AIR FLOW)



## REAR VIEW



## FAN

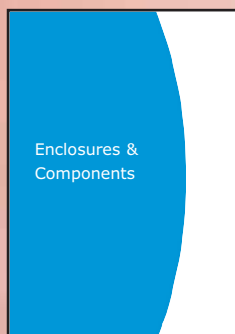
- Mode permanent
- Dimension 120 x 120 38 mm
- Nominal voltage 48 V
- Input power 18,24 W
- Air flow, free air 290 m<sup>3</sup>/h
- Noise 56,5 dB

## SCOPE OF SUPPLY

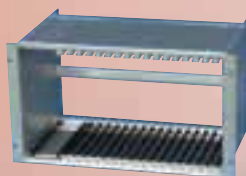
High quality 19" rackmount chassis platform consisting of chromated aluminium enclosures, high performance Advanced TCA backplane. Assembled, wired and tested prior to shipment.

Please note: custom configurations possible.

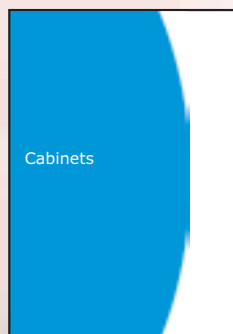
## ENCLOSURES &amp; COMPONENTS



- Sub racks
- Enclosures
- Cabinets
- Front panels
- Injector/Ejector Handles
- Accessories
- Extrusions



## CABINETS



- Dynamic 19" Type 51
- Dynamic Server 19" Type 52
- Advance 19" IP55 Type 53
- Advance 19" EMC Type 53



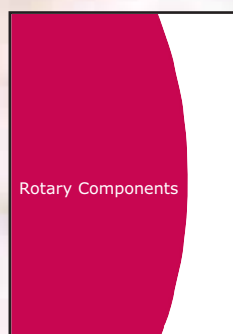
## BACKPLANES



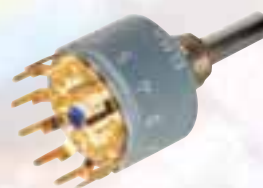
- Custom Solutions
- Switched Fabric Architectures
- CompactPCI
- CompactPCI with H.110
- CompactPCI with Bridge
- VME
- VME64x
- VXI



## ROTARY COMPONENTS



- Coded Switches
- Encoders
- Rotary Switches
- Keylock
- Audio Switches
- Collet Knobs and Accessories
- LED-Arrays



# Reply Fax



Name \_\_\_\_\_ Job title \_\_\_\_\_  
Company \_\_\_\_\_ Department \_\_\_\_\_  
Street \_\_\_\_\_  
Postal code, town / city \_\_\_\_\_ Country \_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_  
email \_\_\_\_\_



### Product:

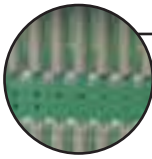
Standard       Modification       Customer integrated

### Bus System:

VMEbus       VME64X       VXI       CompactPCI       \_\_\_\_\_

### Dimensions:

H x W x D:      \_\_\_\_\_ U x \_\_\_\_\_ HP x \_\_\_\_\_ mm



### Number of slots: \_\_\_\_\_ slots

Card depth:       160 mm       220 mm       \_\_\_\_\_ mm  
I/O configuration:       none       80 mm       \_\_\_\_\_ mm

### Power supply:

Input voltage:       open frame       plug in       \_\_\_\_\_ mm  
 AC / \_\_\_\_\_ V       DC / \_\_\_\_\_ V  
Power switch:       Front       Rear  
Power receptacle:       Front       Rear



### Output Voltage and currents:

3.3 V / \_\_\_\_\_ A       +15V / \_\_\_\_\_ A       8 V / \_\_\_\_\_ A  
 5.0 V / \_\_\_\_\_ A       -15V / \_\_\_\_\_ A       \_\_\_\_\_ V / \_\_\_\_\_ A  
 +12 V / \_\_\_\_\_ A       +24V / \_\_\_\_\_ A       \_\_\_\_\_ V / \_\_\_\_\_ A  
 -12 V / \_\_\_\_\_ A       -24V / \_\_\_\_\_ A       \_\_\_\_\_ V / \_\_\_\_\_ A

Ventilation concept:       With Fan       Convection  
Air entry:       Bottom       Top       Rear       Right       Left  
Air exit:       Bottom       Top       Rear       Right       Left  
Filter mat:       Yes       No



### Special requirements

(eg EMC, ambient conditions like temperature, vibration; surface; accessories)  
\_\_\_\_\_  
\_\_\_\_\_  
 Specification / drawing / plan available

### Quantities:

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, pieces

### Special requirements

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Companies
- Representatives

### GERMANY

#### Elma Trenew Electronic GmbH

Stuttgarter Strasse 11  
D-75179 Pforzheim  
Phone +49 7231 97 34 0  
Fax +49 7231 97 34 97  
info@elma.de  
www.elma.com

### SWITZERLAND

#### Elma Electronic AG

Hofstrasse 93, Postfach  
CH-8620 Wetzikon  
Phone +41 1 933 41 11  
Fax +41 1 933 42 15  
sales@elma.ch  
www.elma.com

#### Elma Electronic AG

(Suisse Romande)  
Phone: +41 21 784 00 86  
Fax: +41 21 784 02 48  
vente@elma.ch  
www.elma.com

### UNITED STATES

#### Elma Electronic Inc.

44350 Grimmer Blvd.  
USA-Fremont, CA 94538  
Phone +1 (510) 656-3400  
Fax +1 (510) 656-3783  
sales@elma.com  
www.elma.com

#### Elma Electronic Inc.

9515 Gerwig Lane. Suit 107  
USA-Columbia, MD 21045  
Phone +1 (410) 381-8275  
Fax +1 (410) 381-8276  
elmaeast@erols.com  
www.elma.com

#### Elma Bustronic Corp.

44350 Grimmer Blvd.  
USA-Fremont, CA 94538  
Phone +1 (510) 490-7388  
Fax +1 (510) 490-1853  
sales@bustronic.com  
www.elma.com

### UNITED KINGDOM

#### Elma Electronic UK Ltd.

Premier Business Centre  
Speedfields Park  
Fareham, Hampshire PO14 1TY  
Phone +44 1 329 289 100  
Fax +44 1 329 289 101  
sales@elma-electronic.co.uk  
www.elma.com

### FRANCE

#### Elma Electronic France SA

ZA du Buisson Rond  
F-38460 Villemoirieu  
Phone +33 4 37 06 21 10  
Fax +33 4 37 06 21 19  
info@elma-electronic.fr  
www.elma.com

### ROMANIA

#### Elma Trenew Electronic SRL

Calea Plevnei 139, first floor  
RO-77131 Bucuresti, sector 6  
Phone: +40 2 1 212 65 82  
Fax: +40 2 1 212 65 84  
info@elma.ro  
www.elma.com

### ISRAEL

#### Elma Electronic Israel Ltd.

9, Galis St.  
Petach Tikva, IL-49277  
Phone +972 393 05 025  
Fax +972 393 13 134  
info@elma.co.il  
www.elma.com

Your local partner is: