

SEALED SIX HEAT EXCHANGERS + 16 HEAT PIPES ATR ENCLOSURE

- » No risk, hermetically sealed externally integrated heat pipes
- » 5°C less payload ΔT with respect to SIXHEX series
- » Accepts payloads up to 150 watts per slot
- » Forced-air heat exchanger sidewalls, top cover & rear panel
- » Two internal reverse forced-airflow heat exchangers
- » Supports conduction and air-cooled modules
- » Extensive variety of military power supply options
- » Very high airflow military PX3 rear fans
- » Extreme internal forced-air recirculation
- » Dry air contaminant-free applications



SIXHEX-16HP

SIXHEX + 16 HEAT PIPES

↑700W
PAYLOAD POWER DISSIPATION



SIXHEX-16HP 6U ATR CHASSIS

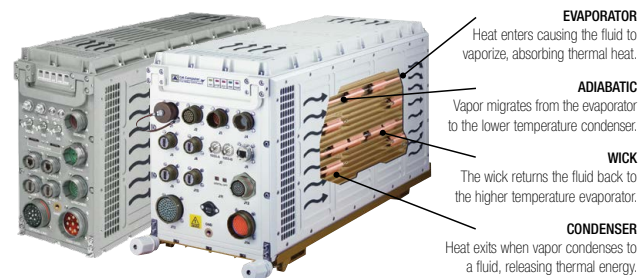
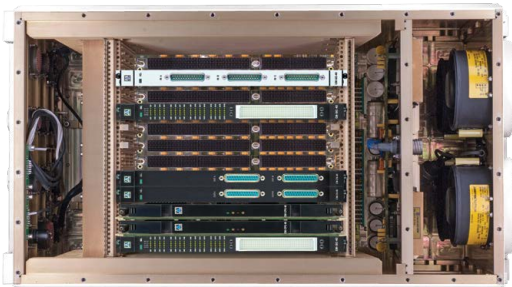


Six Heat Exchangers + 16 Heat Pipes 6U ATR - Contaminant-free suitable for very high wattage applications that demand extreme cooling capability

CM's *Six Heat Exchangers + 16 Heat Pipes* chassis is a hybrid thermal performance solution for the most demanding military embedded systems. Integrates six oversized compact heat exchangers. The sixteen phase transition heat pipes extend payload MTBF by a factor of 1.4. These chassis are ideal for hostile or harmful air environments.

AVAILABILITY

The 6U CM Six Heat Exchangers + 16 Heat Pipes series is available in 5, 7, & 12 slot versions, supporting our full line of 0.8" pitch military VME, cPCI, VPX or Hybrid Backplanes and the complete range of CM military Power Supply Units.



LAYOUT & DESIGN

Internal layout is divided into 4 independent metallic partitions: I/O section at the front, card-cage, PSU section, & 2/4 exhaust PX3 rear fans. This isolates the card-cage, improves EMI/EMC and reduces PSU heat & electrical noise on system electronics.

DISSIPATION & COOLING

Heat within the enclosure is conducted to hollow sidewalls, top cover and rear panel forced-air heat exchangers. Internal recirculation fans and two internal card-cage air heat exchangers ensure dry air is forced across payload modules, minimizing hot-spots and dissipating heat homogeneously.

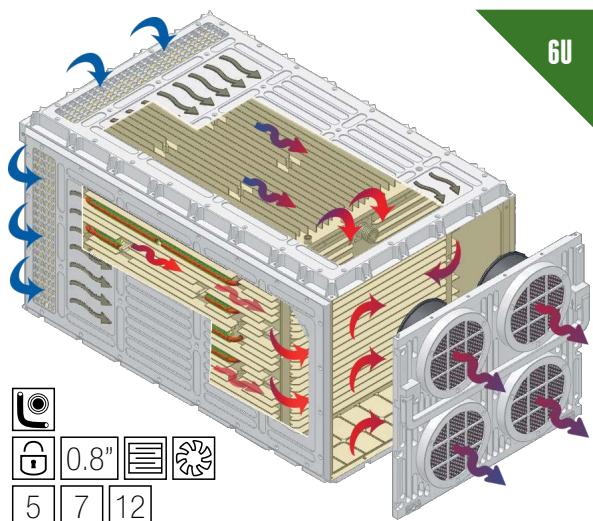
RECOMMENDED PAYLOAD POWER RATINGS

(SELF DISSIPATING @ 55°C AMBIENT: NO EXTERNAL AIRFLOW OR COLD PLATE PROVIDED)

CM-ATR-45/SIXHEX-16HP (12 SLOT) ≤ 700 watts

CM-ATR-35/SIXHEX-16HP (7 SLOT) ≤ 600 watts

CM-ATR-25/SIXHEX-16HP (5 SLOT) ≤ 500 watts



SIXTEEN INTEGRATED HEAT PIPES

HIGHEST DISSIPATION SEALED ATR

LIQUID COOLED ALTERNATIVE



SIXHEX-16HP

SIXHEX + 16 HEAT PIPES



CM MILITARY ATR PRODUCT RANGE

Six Heat Exchangers + 16 Heat Pipes 6U ATR Series Specifications for very high wattage VME, VPX & cPCI applications with 0.8" pitch eurocards

| | CM-ATR-25/SIXHEX-16HP | CM-ATR-35/SIXHEX-16HP | CM-ATR-45/SIXHEX-16HP |
|---------------------------|---|--|--|
| SLOTS | 5 | 7 | 12 |
| WIDTH | 180 mm | 220 mm | 321 mm |
| HEIGHT | 288 mm | 288 mm | 288 mm |
| DEPTH | 510 mm | 510 mm | 510 mm |
| WEIGHT | 9.2 Kg | 13.2 Kg | 17.2 Kg |
| CGTR THERMAL RES. | $\Delta T/W = 0.060^{\circ}\text{C}$ (CIA = 200 CFM) | $\Delta T/W = 0.053^{\circ}\text{C}$ (CIA = 200 CFM) | $\Delta T/W = 0.044^{\circ}\text{C}$ (CIA = 400 CFM) |
| MAX. PSU POWER | 575 watts (28 VDC 475 watts) | 825 watts (28 VDC 675 watts) | 1550 watts (28 VDC 1350 watts) |
| PSU V-INPUT | 28 VDC $\pm 30\%$, 48 VDC $\pm 30\%$, 72 VDC $\pm 30\%$, 270 VDC $\pm 30\%$, Autorange 90-132 VAC RMS & 180-264 VAC RMS @ 47-880 Hz, 3-Phase 200 VAC @ 47-880 Hz $\pm 30\%$ | | |
| STD BACKPLANE | VME64X or cPCI or VPX or Hybrid VME64X/VPX 6U 0.8" pitch backplanes | | |
| BOARD FORMAT | CCS: Conduction-cooled slots only or MCS: Slot-by-slot user configured card-cage allows intermixing conduction-cooled ANSI-VITA 48.2 & air-cooled ANSI-VITA 48.1 boards | | |
| INTERNAL FAN | 54 CFM | 110 CFM | 220 CFM |
| REAR FAN | 200/280 CFM (2 x PX3) | 200/280 CFM (2 x PX3) | 400/560 CFM (4 x PX3) |
| FRONT PANEL AREA | 138 mm x 200 mm | 178 mm x 200 mm | 280 mm x 200 mm |
| CM FRONT PANEL I/O | 6 Power Pins (23 Amp) & 601 I/O Pins (5 Amp) | 6 Power Pins (23 Amp) & 832 I/O Pins (5 Amp) | 6 Power Pins (23 Amp) & 1226 I/O Pins (5 Amp) |
| TEMPERATURE SPECS | -40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$ Operating, -55 $^{\circ}\text{C}$ to 100 $^{\circ}\text{C}$ Storage | | |
| MTBF | 25° GB 82,000 Hours 65° AIC 27,000 Hours | 25° GB 80,000 Hours 65° AIC 26,000 Hours | 25° GB 63,000 Hours 65° AIC 20,000 Hours |
| MOUNTING TRAY | CM-TR-25/SXIHEX | CM-TR-35/SXIHEX | CM-TR-45/SXIHEX |

MORE DETAILED INFORMATION

- CM ATR Common Features
- CM ATR Backplanes
- CM ATR Power Supplies

OPTIONAL COLD PLATE MOUNTING 6U

Chassis can be optionally cold plate mounted to increase power dissipation rates by approximately 5%.

SIX HEAT EXCHANGERS + 16HP ORDERING

For ordering information see page 127 of this catalog.

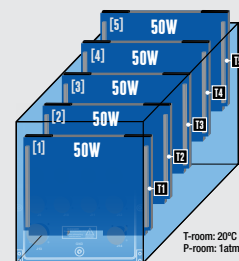
PART NUMBER EXAMPLE:

CM-ATR-35/SIXHEX-16HP/VME64x/28VDC/B-750W/15-100W/TSU/UDP/HTC/HBC/MCS/F28/EMIG/B

- 7 slot, 6U Avionics Enclosure.
- 7 slot VME64x Backplane for 6U 0.8" boards, 160 pin J0/J1/J2 connectors.
- 28VDC Power Supply Unit 750W (+5VDC @ 80A, +3.3VDC @ 22A, $\pm 12\text{VDC}$ @ 16A).
- (+)15VDC @ 6.6A DC/DC AUX1 user output on backplane.
- Temperature Supervisory Unit.
- High Top Cover (50mm wiring clearance).
- High profile Bottom Cover (50mm).
- 2x Rotron PX3 military fan fitted for 28 VDC installed at the rear (200 CFM total).
- EMI shielded finger guards.
- Six Heat Exchangers + 16 HP.
- User defined front panel.
- Universal card-cage slots.
- Enclosure color: Black.



CM ATR CHASSIS THERMAL TESTING

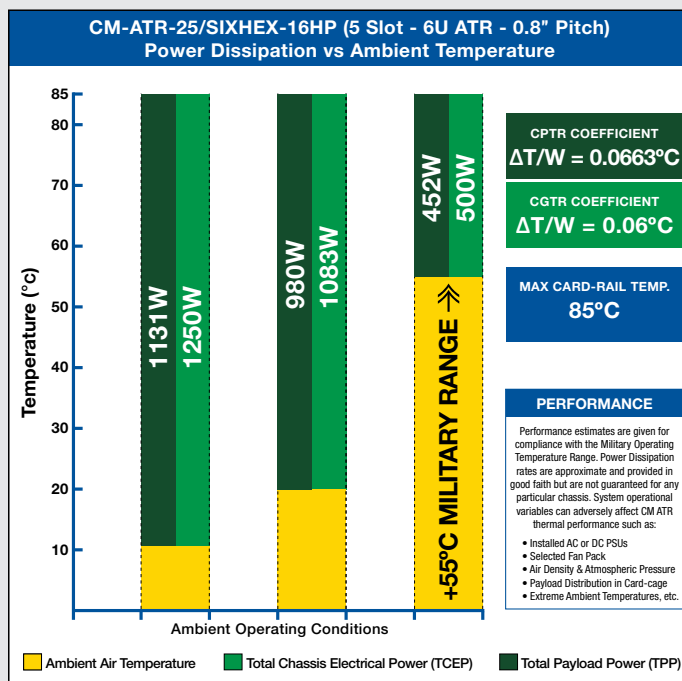
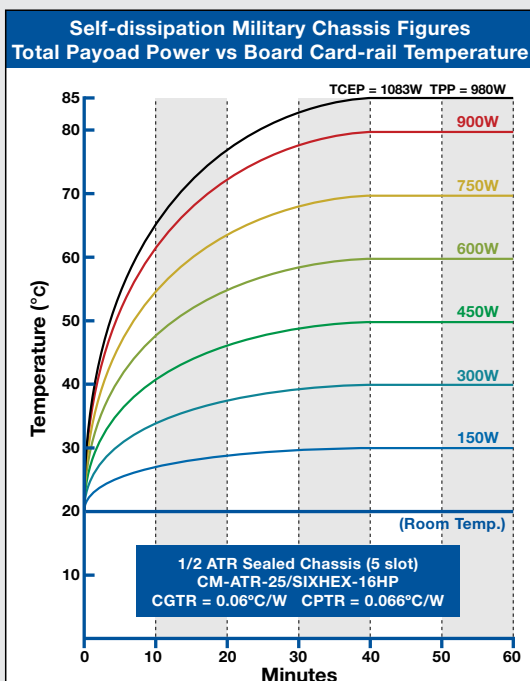
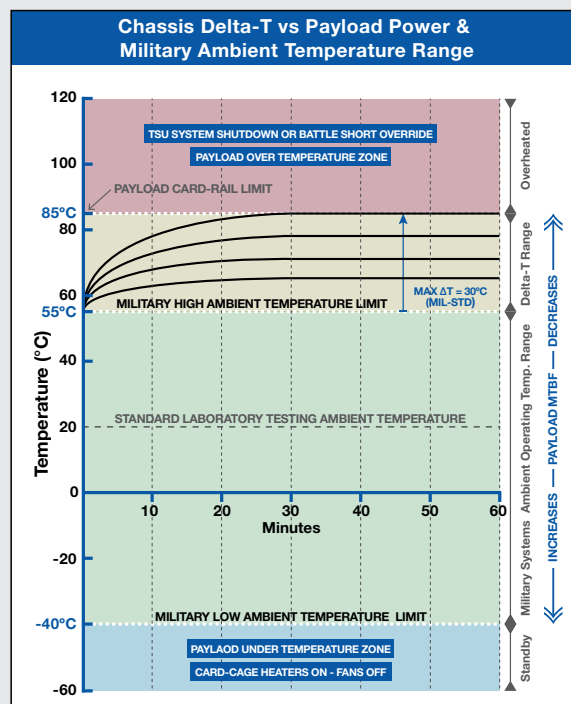
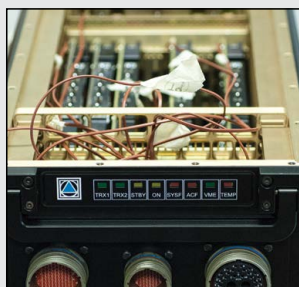
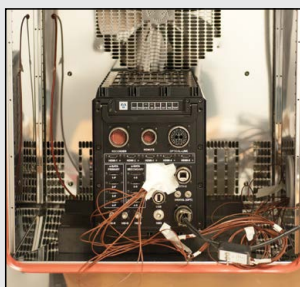


6U SIXHEX-16HP Military ATR Chassis Performance suitable for high wattage, 0.8" pitch - sealed applications

MAXIMUM MILITARY SYSTEM DELTA-T

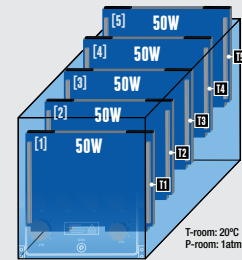
Maximum conduction-cooled payload card-rail temperature is typically 85°C. To comply with MIL-STD-810, systems must be operational up to 55°C ambient (worst case scenario).

In theory, this restricts payload maximum ΔT to 85°C - 55°C ($\Delta T_{max} = 30^\circ\text{C}$). Temperatures in excess of 85°C dramatically increase the risk of module failure and reduce component MTBF. Military limits may be relaxed for systems serving in 'indoor environments' (e.g. to 40°C ambient). Under these conditions ΔT margin can be increased to 85°C - 40°C = 45°C ΔT_{max} .

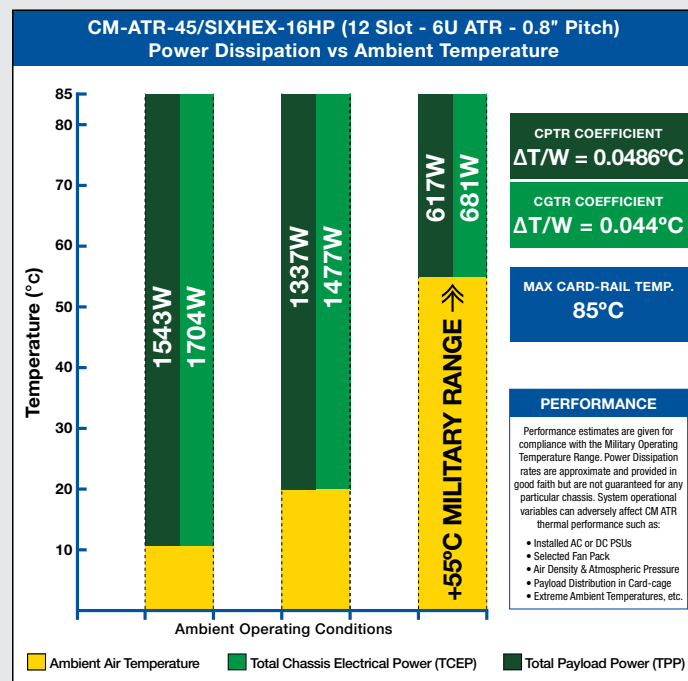
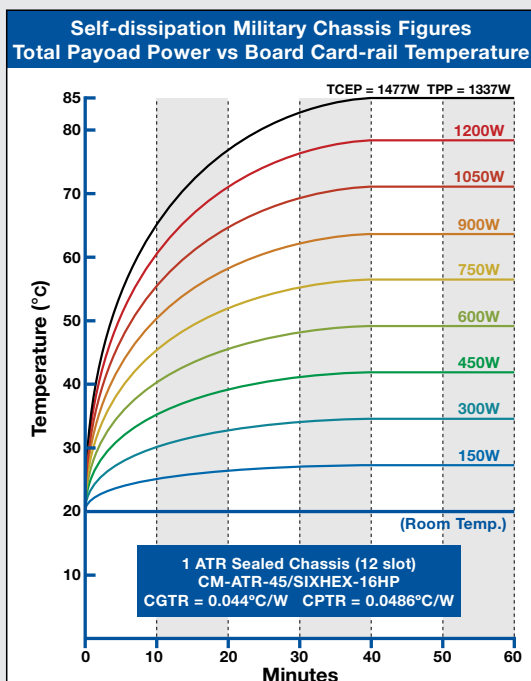
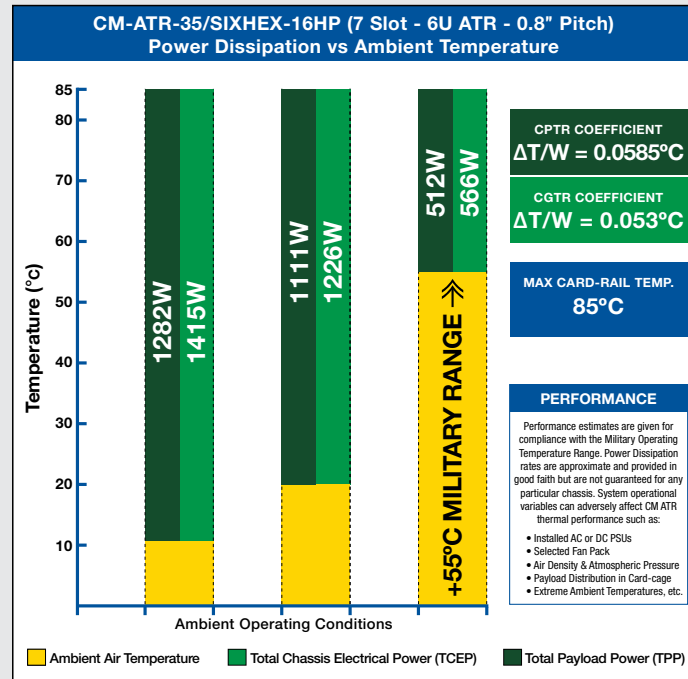
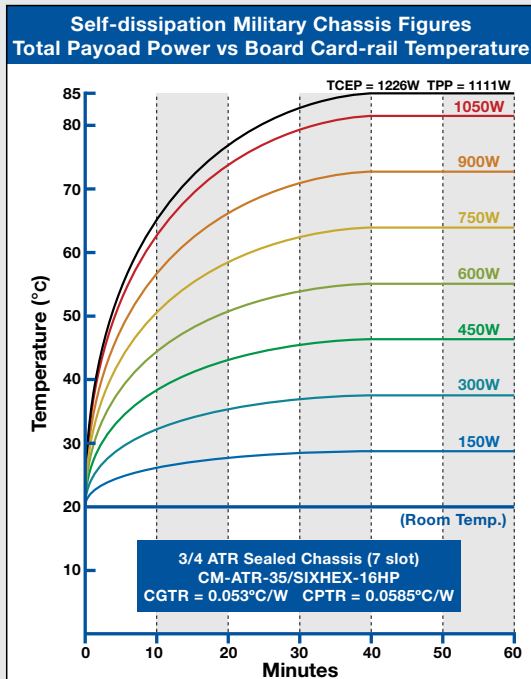




CM ATR CHASSIS THERMAL TESTING



6U SIXHEX-16HP Military ATR Chassis Performance suitable for high wattage, 0.8" pitch - sealed applications





CM ATR ORDERING INFORMATION



6U Military ATR Chassis Ordering high performance military aerospace enclosure part number configuration

CHASSIS GENERIC PART NUMBER:

CM-ATR-S5 /CT /B /I /W /3.3 /D1 /D2 /R /S /FP /TC /BC /CS /F /G /C

/S5 COTS Enclosure Size/Model

CM-ATR-25: 5 Slot 6U Enclosure (0.8" pitch - 1/2 ATR type)
CM-ATR-125: 5 Slot 6U Enclosure (1" pitch - 1/2 ATR type)
CM-ATR-35: 7 Slot 6U Enclosure (0.8" pitch - 3/4 ATR type)
CM-ATR-135: 7 Slot 6U Enclosure (1" pitch - 3/4 ATR type)
CM-ATR-45: 12 Slot 6U Enclosure (0.8" pitch - 1 ATR type)

/CT Enclosure Cooling Technique

S: Standard Sealed (0.8" pitch)
SEF: Sealed with Extended Fins (0.8" pitch)
SEF-HP: Sealed with Extended Fins + 18/20 Heat Pipes (0.8" pitch)
HES: Sealed with 4 Heat Exchangers (0.8" and 1" pitch versions)
SIXHEX: Sealed with 6 Heat Exchangers (0.8" and 1" pitch versions)
SIXHEX-HP: Sealed with 6 Heat Exchangers and integrated Heat Pipes (0.8" pitch with 16HP and 1" pitch with 20HP versions)
FAC: Flowthrough Air Cooled Enclosure (open, non-sealed) (0.8" pitch)

/B Backplane Type (slot pitch according to chassis model)

VME64x: Military VME64x Backplane
cPCI: Military Compact PCI Backplane
VPX: VITA 46 Military VPX Backplane
VME64x/VPX: Hybrid VME64x mixed with VPX Military Backplane
VME64x/cPCI: Hybrid VME64x mixed with cPCI Military Backplane
Note: Hybrid dual bus backplanes are available for a limited set of chassis only

/I PSU Input Power Voltage

28VDC: 28 VDC Input
48VDC: 48 VDC Input
72VDC: 72 VDC Input
270VDC: 270 VDC Input
90-264VAC: Autorange 90-264 VAC @ 47-880 Hz Input
200VAC-3PH: 200 VAC 3 Phase @ 47-880 Hz Input

/W Power Supply Unit Watts

All PSUs = All PSUs except 28 VDC input | 28 VDC = 28 VDC input only

PSUs for CM-ATR-25 (5 slot)

Models: /S or /SEF or /SEF-HP or /HES (0.8") or /FAC

300W: 28 VDC (+5 VDC @ 20A, +3.3 VDC @ 5A, ±12 VDC @ 8A)
400W: All PSUs (+5 VDC @ 20A, +3.3 VDC @ 5A, ±12 VDC @ 12A)

Models: /S or /SEF or /SEF-HP or /HES or /SIXHEX or /SIXHEX-HP

A-475W: 28 VDC (+5 VDC @ 40A, +3.3 VDC @ 22A, ±12 VDC @ 8A)
A-575W: All PSUs (+5 VDC @ 40A, +3.3 VDC @ 22A, ±12 VDC @ 12A)
B-450W: 28 VDC (+5 VDC @ 20A, +3.3 VDC @ 45A, ±12 VDC @ 8A)
B-550W: All PSUs (+5 VDC @ 20A, +3.3 VDC @ 45A, ±12 VDC @ 12A)
C-475W: 28 VDC (+5 VDC @ 20A, +3.3 VDC @ 22A, +12 VDC @ 16A, -12 VDC @ 8A)
C-575W: All PSUs (+5 VDC @ 20A, +3.3 VDC @ 22A, +12 VDC @ 21A, -12 VDC @ 12A)

MOUNTING TRAY GENERIC PART NUMBER:

CM-TR-S5 /CT

PSUs for CM-ATR-(1)35 (7 slot) & CM-ATR-125 (5 Slot 1" Pitch)

Models: /S or /SEF or /SEF-HP or /HES (0.8") or /FAC

400W: 28 VDC (+5 VDC @ 40A, +3.3 VDC @ 5A, ±12 VDC @ 8A)
500W: All PSUs (+5 VDC @ 40A, +3.3 VDC @ 5A, ±12 VDC @ 12A)

Models: /S or /SEF or /SEF-HP or /HES or /SIXHEX or /SIXHEX-HP

A-475W: 28 VDC (+5 VDC @ 40A, +3.3 VDC @ 22A, ±12 VDC @ 8A)
A-575W: All PSUs (+5 VDC @ 40A, +3.3 VDC @ 22A, ±12 VDC @ 12A)
A-675W: 28 VDC (+5 VDC @ 80A, +3.3 VDC @ 22A, ±12 VDC @ 8A)
A-775W: All PSUs (+5 VDC @ 80A, +3.3 VDC @ 22A, ±12 VDC @ 12A)
B-450W: 28 VDC (+5 VDC @ 20A, +3.3 VDC @ 45A, ±12 VDC @ 8A)
B-550W: All PSUs (+5 VDC @ 20A, +3.3 VDC @ 45A, ±12 VDC @ 12A)
B-564W: 28 VDC (+5 VDC @ 20A, +3.3 VDC @ 80A, ±12 VDC @ 8A)
B-664W: All PSUs (+5 VDC @ 20A, +3.3 VDC @ 80A, ±12 VDC @ 12A)
C-475W: 28 VDC (+5 VDC @ 20A, +3.3 VDC @ 22A, +12 VDC @ 16A, -12 VDC @ 8A)
C-575W: All PSUs (+5 VDC @ 20A, +3.3 VDC @ 22A, +12 VDC @ 21A, -12 VDC @ 12A)
C-775W: 28 VDC (+5 VDC @ 20A, +3.3 VDC @ 22A, +12 VDC @ 41A, -12 VDC @ 8A)
C-825W: All PSUs (+5 VDC @ 20A, +3.3 VDC @ 22A, +12 VDC @ 41A, -12 VDC @ 12A)
D-550W: 28 VDC (+5 VDC @ 40A, +3.3 VDC @ 45A, ±12 VDC @ 8A)
D-650W: All PSUs (+5 VDC @ 40A, +3.3 VDC @ 45A, ±12 VDC @ 12A)
E-550W: 28 VDC (+5 VDC @ 20A, +3.3 VDC @ 45A, +12 VDC @ 16A, -12 VDC @ 8A)
E-650W: All PSUs (+5 VDC @ 20A, +3.3 VDC @ 45A, +12 VDC @ 21A, -12 VDC @ 12A)
F-575W: 28 VDC (+5 VDC @ 40A, +3.3 VDC @ 22A, +12 VDC @ 16A, -12 VDC @ 8A)
F-675W: All PSUs (+5 VDC @ 40A, +3.3 VDC @ 22A, +12 VDC @ 21A, -12 VDC @ 12A)

Dual-redundant PSUs for /HES or /SIXHEX or /SIXHEX-HP models

R2x500W: (+5 VDC @ 25A, +3.3 VDC @ 23A, ±12 VDC @ 12A)

PSU for CM-ATR-45 (12 slot)

Models: /S or /SEF or /SEF-HP or /HES (0.8") or /FAC

950W: 28 VDC (+5 VDC @ 80A, +3.3 VDC @ 45A, ±12 VDC @ 16A)
1050W: All PSUs (+5 VDC @ 80A, +3.3 VDC @ 45A, ±12 VDC @ 21A)

Models: /HES or /SIXHEX or /SIXHEX-HP

A-950W: 28 VDC (+5 VDC @ 80A, +3.3 VDC @ 45A, ±12 VDC @ 16A)
A-1050W: All PSUs (+5 VDC @ 80A, +3.3 VDC @ 45A, ±12 VDC @ 21A)
B-950W: 28 VDC (+5 VDC @ 40A, +3.3 VDC @ 45A, +12 VDC @ 33A, -12 VDC @ 16A)
B-1100W: All PSUs (+5 VDC @ 40A, +3.3 VDC @ 45A, +12 VDC @ 41A, -12 VDC @ 20A)
B-1065W: 28 VDC (+5 VDC @ 80A, +3.3 VDC @ 80A, ±12 VDC @ 16A)
B-1165W: All PSUs (+5 VDC @ 80A, +3.3 VDC @ 80A, ±12 VDC @ 21A)
C-864W: 28 VDC (+5 VDC @ 40A, +3.3 VDC @ 80A, ±12 VDC @ 16A)
C-964W: All PSUs (+5 VDC @ 40A, +3.3 VDC @ 80A, ±12 VDC @ 20A)
C-1225W: 28 VDC (+5 VDC @ 80A, +3.3 VDC @ 160A, ±12 VDC @ 16A)
C-1425W: All PSUs (+5 VDC @ 80A, +3.3 VDC @ 160A, ±12 VDC @ 21A)
D-1350W: 28 VDC (+5 VDC @ 160A, +3.3 VDC @ 80A, ±12 VDC @ 16A)
D-1550W: All PSUs (+5 VDC @ 160A, +3.3 VDC @ 80A, ±12 VDC @ 21A)

Dual-redundant PSUs for /HES or /SIXHEX or /SIXHEX-HP models

R2x725W: (+5 VDC @ 20A, +3.3 VDC @ 23A, ±12 VDC @ 12A, ±28 VDC @ 9A)
R2x675W: (+5 VDC @ 60A, +3.3 VDC @ 23A, ±12 VDC @ 12A)
R2x625W: (+5 VDC @ 20A, +3.3 VDC @ 68A, ±12 VDC @ 12A)
R2x710W: (+5 VDC @ 20A, +3.3 VDC @ 23A, +12 VDC @ 32A, -12 VDC @ 12A)



/3.3 DC/DC AUX0 fitted for 3.3VDC (CM-ATR-25 & CM-ATR-35)

3.3-75W: 3.3VDC @ 22A (in lieu of default 3.3 VDC @ 5A)

Optional DC/DC AUX0 converter on Backplane fitted for 3.3VDC. Option suited for 1st generation PSU models 300W/400W/500W. Note: If /3.3-75W is not selected, DC/DC power socket AUX0 remains free to the user.

/D1 DC/DC AUX1 (CM-ATR-35 & CM-ATR-45)

/D2 DC/DC AUX2 (CM-ATR-45)

D1: 100W Optional DC/DC Converter on Backplane. User-defined output 1
D2: 100W Optional DC/DC Converter on Backplane. User-defined output 2

Backplane auxiliary DC/DC converter output options: +2VDC 50W, -2VDC 50W, +3.3VDC 75W, -3.3VDC 75W, +5VDC 100W, -5VDC 100W, +12VDC 100W, -12VDC 100W, +15VDC 100W, -15VDC 100W, +28VDC 100W, -28VDC 100W, +48VDC 100W, -48VDC 100W.

Ordering Examples: 48-100W » 48VDC @ 2A / -5-100W » -5VDC @ 20A / 2-50W » 2VDC @ 25A / ±15-100W » ±15VDC @ 6A

/R Redundant PSU (Plug-in for VMEbus systems only)

RPSU for CM-ATR-35 (7 slot) & CM-ATR-45 (12 slot)

RA-475W: 28 VDC (+5 VDC @ 40A, +3.3 VDC @ 22A, ±12 VDC @ 8A)

RB-575W: All PSUs (+5 VDC @ 40A, +3.3 VDC @ 22A, ±12 VDC @ 12A)

/S Temperature Supervisory Unit

TSU: Optionally installed in backplane (for /S or /SEF or /FAC models)

Note: TSU is fitted as standard in /SEF-HP, /HES, /SIXHEX & /SIXHEX-HP models

/FP Front Panel Layout

CMP: Standard CM front panel fitted with MIL-DTL-38999 connectors

UDP: User-defined front panel layout (requires customer drawing)

/TC Chassis Top Cover

STC: Standard top cover (wiring clearance 20mm)

FTC: Finned top cover (wiring clearance 20mm)*

HTC: High profile top cover (wiring clearance 35mm)

HETC: Heat Exchanger top cover (wiring clearance 20mm)**

EHETC: Extended Heat Exchanger top cover (wiring clearance 35mm)

** FTC chassis top cover is standard on /SEF & /SEF-HP models*

*** HETC chassis top cover is standard on /HES, /SIXHEX & /SIXHEX-HP models*

/BC Chassis Bottom Cover

SBC: Standard bottom cover (wiring clearance below backplane 25mm)

HBC: High profile bottom cover (wiring clearance below backplane 50mm)*

** 50mm bottom clearance is standard on /HES-1", /SIXHEX & /SIXHEX-HP models*

/CS Chassis Card-Cage Slot

MCS: Mixed Card-cage slots (mixed conduction-cooled & air-cooled boards)

CCS: Conduction-cooled Card-cage slots (conduction-cooled boards only)*

** CCS card-cage is standard on /HES-1", /SIXHEX-1" & /SIXHEX-HP-1" models*

/F Rear-Mounted Fan Assembly

Fans for CM-ATR-(1)25 (5 slot) & CM-ATR-(1)35 (7 slot)

Models: /FAC

F115-400: 1x65 CFM 115 VAC @ 400Hz Rotron PX2 Military fan

F200-400: 1x120 CFM 200 VAC 3PH @ 400Hz Rotron PX2 fan

F28: 1x65 CFM 28 VDC Rotron PX2 Military fan (through DC/AC converter)

Models: /HES (0.8")

F115-400: 2x65 CFM 115 VAC @ 400Hz Rotron PX2 Military fans

F200-400: 2x120 CFM 200 VAC 3PH @ 400Hz Rotron PX2 fans

F28: 2x65 CFM 28 VDC Rotron PX2 Military fans (through DC/AC converter)

Models: /HES (1") /SIXHEX or /SIXHEX-HP

F115-400: 2x100 CFM 115 VAC @ 400Hz Rotron PX3 Military fans

F200-400: 2x140 CFM 200 VAC 3PH @ 400Hz Rotron PX3 fans

F28: 2x100 CFM 28 VDC Rotron PX3 Military fans

F115-60: 2x100 CFM 115 VAC @ 60Hz Rugged fans

F220-50: 2x100 CFM 220 VAC @ 50Hz Rugged fans

Fans for CM-ATR-45 (12 slot)

Models: /FAC

F115-400: 2x100 CFM 115 VAC @ 400Hz Rotron PX3 Military fans

F200-400: 2x140 CFM 200 VAC 3PH @ 400Hz Rotron PX3 fans

F28: 2x100 CFM 28 VDC Rotron PX3 Military fans

Models: /HES

F115-400: 4x65 CFM 115 VAC @ 400Hz Rotron PX2 Military fans

F200-400: 4x120 CFM 200 VAC 3PH @ 400Hz Rotron PX2 fans

F28: 4x65 CFM 28 VDC Rotron PX2 Military fans (through DC/AC converter)

Models: /SIXHEX or /SIXHEX-HP

F115-400: 4x100 CFM 115 VAC @ 400Hz Rotron PX3 Military fans

F200-400: 4x140 CFM 200 VAC 3PH @ 400Hz Rotron PX3 fans

F28: 4x100 CFM 28 VDC Rotron PX3 Military fans

F115-60: 4x100 CFM 115 VAC @ 60Hz Rugged fans

F220-50: 4x100 CFM 220 VAC @ 50Hz Rugged fans

VAP: Vehicle Air-Plenum according to system specs (external forced air source)

- No rear fan required for /S, /SEF & /SEF-HP models, omit option from part number

- Rugged fans are fitted with aluminum housing. Operating range: -10°C to +70°C

- Full military Rotron PX2 & PX3 AC fans. Operating range: -54°C to +125°C

- Note: Fan input voltage can be selected independently of main PSU voltage

/G Fan Finger Guards

STDG: Standard Rotron PX2/PX3 finger guards

EMIG: Optional EMI shielding finger guards with honeycomb filter

GNF: Optional finger guards with acoustic noise filter (-5dB)

/C Chassis Color

B: Black, **G:** Navy Grey, **E:** Army Dark Earth, **W:** White, **R:** Red, **PT:** Platinum,

YW: Yellow, **GN:** Green, **BLU:** Dark Blue, **CR:** Chromate, **O:** Other (user-defined)

PART NUMBER EXAMPLE:

CM-ATR-45/HES/VME64x/90-264VAC/A-1050W/15-100W/-15-100W/UDP/HTC/HBC/MCS/F200-400/EMIG/B

- 12 slot, Heat Exchanger Sidewalls. 6U Avionics Enclosure.
- 12 slot VME64x backplane for 6U boards (0.8" pitch).
- Auto-range 90-264VAC @ 47-880Hz Input Power Supply.
- A-1050W power supply (+5VDC @ 80A, +3.3VDC @ 45A, ±12VDC @ 21A).
- (±)15VDC @ 6.6A DC/DC AUX1 & AUX2 user output on backplane.
- Temperature Supervisory Unit fitted as standard.
- User-defined front panel layout.
- High profile Top & Bottom cover. Universal Card-cage Slots.
- 4x Rotron PX2 military fan 115VAC @ 400Hz (260 CFM total).
- EMI shielded finger guards. Enclosure color: Black.



based on system total payload power dissipation



| | |
|---------------|---|
| CHMPF | : Chassis Half MTBF Power Factor |
| CPMDC | : Chassis Payload MTBF Degradation Coefficient |
| CIA | : Chassis Installed Airflow |
| CEA | : Chassis Effective Airflow |
| ADDT | : Ambient Airflow Delta-T |
| CSAOP | : Chassis Stable Airflow Operating Point |
| CIARC | : Chassis Impedance Airflow Reduction Coefficient |
| MFARC | : Multiple Fan Airflow Reduction Coefficient |
| OARC | : Overall Airflow Reduction Coefficient |
| SCIDPC | : Sealed Chassis Indirect Delta-T Power Coefficient |
| PEADT | : Payload to Exhaust Airflow Delta-T |
| CCAAT | : Chassis Cooling Airflow Average Temperature |