



OVERVIEW:

T-SERIES SERVER, CO-LOCATION, AND DATA CENTER RACKS

Designed to provide housing for servers, hubs, routers and network equipment, along with structured cabling components, the Server Rack provides a highly attractive profile in a robustly constructed cabinet. The frame is built from highstrength/low weight aluminum extrusions, to provide maximum strength and light-weight performance.

TA-SERIES

- Designed for blade server applications
- Advanced cooling
- Innovative cable management



Openings in top corner pieces covered with brushes for easy cable feed through, act as airflow containment baffles.

TM-SERIES

- Liquid Heat Exchange Solution
- Dissipates a total of approximately 6KW in a closed loop heat exchangers and fan trays.
- Example shown is a custom demo unit - call Optima to discuss your application



ADVANTAGES:

- Advanced cooling techniques to eliminate the heat build up associated with the increasing heat density.
- Engineered Cable Management solutions to efficiently control the increasing density of I/O cabling.
- Modular design reduces installation, upgrade and service time.
- Wide range of industry standard sizes and options.
- Custom design options with a standard platform and cost.
- Selection of contemporary color choices. (custom color matching also available)
- Free assembly. Optima expertly assembles your cabinet at no charge.



Base designed for under floor cable entry with integrated divider brackets to route cables to left or right side.

DESCRIPTION

The TA Series is a full featured cabinet with an attractive appearance for high profile, high demand applications. Available with three base options and a modular cable management system, the rack can be configured to meet the specific needs of the application. Design is based on a rugged steel frame with standard removable side panels and front/rear 4 point latching doors while providing a solid and secure housing for your electronics. Advanced cooling techniques are employed to eliminate heat build up.

CABINET FEATURES

- 19" Rackmount (600mm).
- Heights: 35U, 40U, 44U.
- Depth: 24", 30", or 600mm
- Modern design, front and rear door.
- Rugged door hinges.
- 4 point latching handle system.
- Removable side panels (quarter turns, slotted or keyed).
- 3 piece top cover with fan plate and cable access panels.
- Door gasket for environmental sealing.
- Modular base with options for: fixed mount, levelers or casters.

CABLE MANAGEMENT FEATURES

- Slotted base, cable feeds with integrated management bracket.
- Configurable cable brackets for vertical and horizontal cable management.
- 19" vertical bracket accommodates industry standard cable brackets.
- Fiber optic router for horizontal and vertical management.
- 19" vertical brackets notched for up to 1" Velcro straps.
- 3 x depth stiffeners for tying cables front to rear.
- Top front and top rear cable access panels.
- Optional 1U cable trough for mounting between sub-racks.

COOLING FEATURES

- Integrated air baffling in cabinet to ensure cooling path integrity.
- Top cabinet exhaust.
- 4 x 235CFM, high volume fans.

SCOPE OF SUPPLY :

- Basic cabinet to include: 1 x frame, 2 x mounting rails (pairs, with 10A clip nuts and panel screws), 1 x base, 1 x top panel, painted and assembled. 1 x Front door, 1x Rear door, 2 x Side panel, (cooling and cable management optional).

ORDER INFORMATION:

DESCRIPTION	ORDER NUMBER
TA Series, 44U, 19" (600mm) Cabinet	ATHAA58CED6AF66



DESCRIPTION

For more demanding cooling needs, Optima's Liquid Heat Exchange solution is offered through our TM Series or can be incorporated into our other cabinet families. From a base cooling implementation to an integrated rackmount cabinet/subrack system, Optima has a solution for you. Various configurations of heat exchangers and optional fan trays can be configured. Additionally, Optima can provide PSU options, subrack/enclosure design, cabling options, and accessories. Contact Optima to discuss your advanced cooling needs.

FEATURES

- Liquid heat exchange
- Custom sizes, configurations
- Dissipates up to 6KW in cost effective solution
- Various levels of sheilding and ruggedization are available

ORDER INFORMATION:

DESCRIPTION	ORDER NUMBER
Custom demo unit only	N/A

TD SERIES - COST EFFECTIVE DATA CENTER RACKS



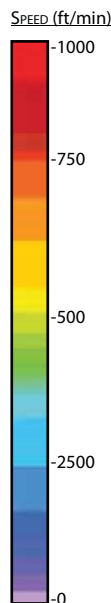
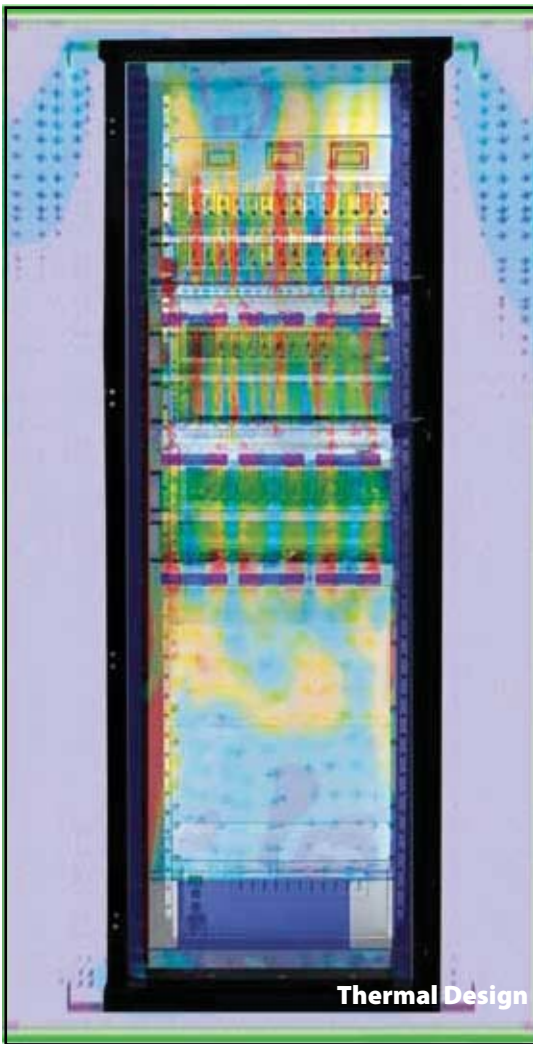
Designed to provide housing for servers, hubs, routers and network equipment, along with structured cabling components, the Server Rack provides a highly attractive profile in a robustly constructed cabinet. The frame is constructed from high-strength/low weight aluminum extrusion, to provide maximum strength and light-weight performance. Available in two widths: 23.5" for 19" EIA and DIN standard equipment mounting, and 31.5" width, designed to mount 19" EIA and DIN standard equipment and to provide cable routing on both sides of the cabinet.

SERVER RACK DESIGN FEATURES

- Conforms to EIA-STD 310 and DIN 41494 standards
- Top and bottom covers with covered cable exit cut-outs
- Numbered "U" positions for ease of equipment mounting
- Fully adjustable mounting angles at front and rear
- 1500 pound load capacity
- Access to equipment from front, rear and sides
- Usable Height: 24U (42.12"), 30U (52.12") and 42U (73.5")
- Overall Height: 24U (53"), 30U (63") and 42U (84") including casters
- Usable Width: 19" EIA and DIN standard mounting
- Overall width: 23.5" and 31.5"
- Usable Depth: 26.5" and 34"
- Overall Depth: 31.5" (800mm) and 39" (1000mm)

CONFIGURATOR - SERVER RACKS & DATACENTER

HEATING DISTRIBUTION AND AIR-FLOW SPECIFICATIONS -- CUSTOM MTCA EXAMPLE

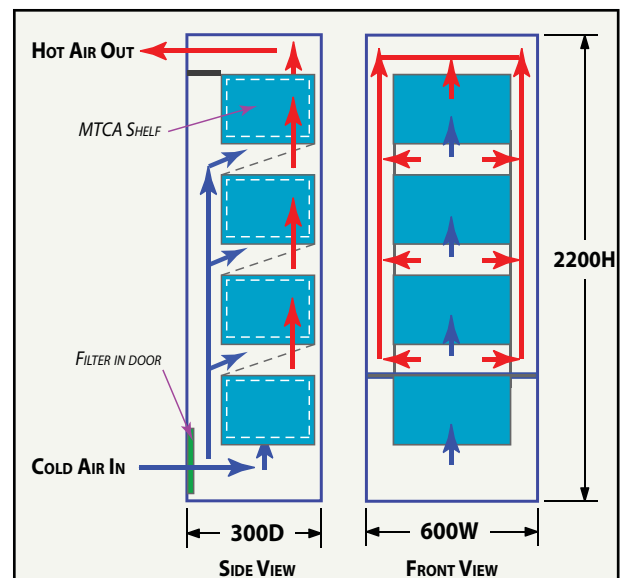


A) If you permit the max air temp to reach 40C:

Temperature Air enters HX = 40C Temperature Air exits HX = 31.4C
 Water flow: 1 GPM assumed Temperature Water enters HX = 27.1C
 Temperature Water exits HX = 30.2C Water Pressure drop = 6 PSI
 Heat Dissipation = 800 Watts

B) If you specify max air exit temp 25C:

Temperature Air enters HX = 33.6C Temperature Air exits HX = 25.0C
 Water flow: 1 GPM assumed Temperature Water enters HX = 20.7C
 Temperature Water exits HX = 23.8C Water Pressure drop = 6 PSI
 Heat Dissipation = 800 Watts



1,2 FRAME STYLE

- TA > Server
- TM > LHE
- TD > DATACENTER
- ZZ > Custom

3 FRAME HEIGHT

- F > 35U = (61.38" / 1559mm)
- G > 40U = (70.12" / 1781mm)
- H > 44U = (77.12" / 1958mm)
- Z > Custom

4 FRAME WIDTH

- A > 19"/560mm (17.81"/452.4mm)
- D > 19"/600mm (17.81"/452.4mm)
- Z > Custom

5 FRAME DEPTH

- A > 24" = (609.6mm)
- B > 30" = (762.0mm)
- E > 600mm
- Z > Custom

6 MOUNTING RAIL POSITION

- 1 > Standard
- 2 > Recessed Front
- 3 > Recessed Rear
- 4 > Recessed Front & Rear
- X > Not installed
- Z > Custom

7 MOUNTING RAILS

- 5 > Telco - 40U & 44U (TIR)
- 6 > Reducer rail (RED)
- 7 > Server rail (SQ)
- X > Not installed
- Z > Custom

8 BASE

- A > Standard (BS)
- B > Standard w/casters
- C > Standard w/levelers
- D > Standard w/both C&L
- E > Cable egress (CE)
- F > Cable egress w/levelers
- G > Cable egress w/casters
- H > Cable egress w/both C&L
- X > Not installed (XB)
- Z > Custom

9 TOP PANEL

- A > Solid (TS)
- B > Perforated (PT)
- D > Cable egress
- E > Fan (TF)
- X > Not installed (XT)
- Z > Custom

10 BOTTOM PANEL

- A > Solid
- B > Perforated
- C > Cable Egress
- X > Not installed
- Z > Custom

11 SIDE PANEL

- 4 > L only (lift off)
- 5 > R only (lift off)
- 6 > L & R (lift off)
- X > Not installed
- Z > Custom

12 FRONT DOOR

- J > ACRYLIC RH
- K > ACRYLIC LH
- X > Not installed
- Z > Custom

13 REAR DOOR

- A > SOLID RH
- F > SOLID LH
- X > Not installed
- Z > Custom

14,15 BODY/TRIM COLOR

- 1 > Black (207)
- 2 > Sky Blue (210)
- 3 > White (931)
- 4 > Deep Charcoal (209)
- 5 > Light Gray (201)
- 6 > Beige (205)
- Z > Custom

* For specific information on the cooling options please contact Optima EPS sales