

# ENHANCED STEELFRAME CABINET

## KEY FEATURES

- Fully perforated front door with optimized open space lets air into the cabinet while maintaining security with a stylish locking swing handle latch.
- Integral Air Dam keeps air flowing one way through the cabinet improving the cooling effect on equipment.
- External Cable Managers get cables out of the cabinet to enhance airflow and minimize cable tangles.
- Intelligent Fan Kit quickly removes hot air from the cabinet, and Airflow Duct isolates hot air from the room.

## APPLICATIONS

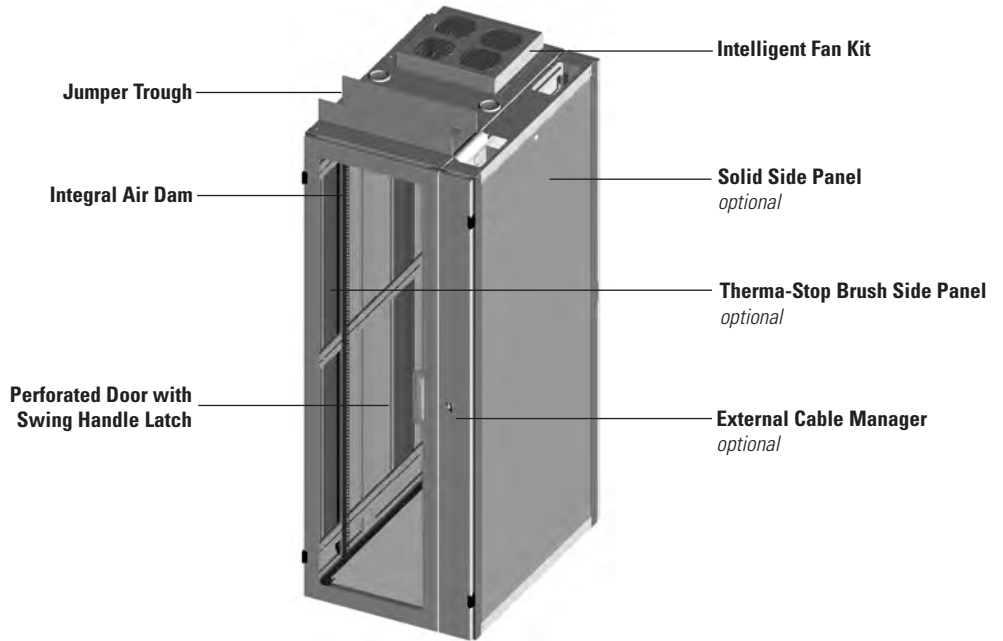
- Store and secure computer server and data storage equipment in data center computer rooms.
- Organize cables with External Cable Manager.

## USE WITH

- External Cable Manager
- Therma-Stop Brush Side Panels
- Solid Side Panels
- Filler Panels
- Airflow Duct
- Intelligent Fan Kit
- Electronic Locks
- Environmental Monitoring

## RELATED ACCESSORIES

- Electronic Locking System
- Remote Infrastructure Management (RIM-600) System
- LCD Monitor + Shelf
- Keyboard + Tray
- Universal Horizontal Cable Managers
- Universal Cable Runway
- Vertical Power Strips



**High kW Cabinet**

Enhanced SteelFrame Cabinet is an easy way to organize, store and secure equipment in your data center computer room. Designed as a modular system, you select cabinets, external cable managers and side panels to create equipment storage bays.

Enhanced SteelFrame is a 24"W x 84"H (610 mm x 2130 mm) cabinet that includes two pairs of equipment mounting rails to provide front and rear support for 19" rack-mount equipment. Enhanced SteelFrame is available in a 36" (910 mm) or 39" (990 mm) usable depth, provides 45 RMU for equipment and will support 2,000 lb (907.2 kg). An Integral Air Dam prevents air from flowing around rack-mount equipment and blocks hot air at the rear of the cabinet when used with accessory Filler Panels to close open rack-mount spaces. There are two configurations. Use the Low kW Cabinet with perforated front and rear doors for front-to-rear airflow and heat loads up to five kilowatts. Use the High kW Cabinet with perforated front door, solid rear door and top fan for front-to-top airflow and heat loads above five kilowatts. For best results with higher heat loads, keep hot air out of the room by ducting it through an Airflow Duct into a drop ceiling plenum.

Manage network, power and peripheral cables in the External Cable Manager. External Cable Manager attaches to the side of the cabinet and includes a front and rear vertical cable management trough and four front-to-rear horizontal cable troughs. The vertical cable management troughs have openings that align with each rack-mount space in the cabinet. Managing cables outside of the cabinet is easier and helps to keep equipment cool by preventing cable tangles that block airflow through the hot side of the cabinet. Use 12"W (300 mm) managers in between cabinets in multi-cabinet bays. Use 6"W (150 mm) managers on the ends of cabinet bays. External Cable Managers include locking solid front and rear doors.

Cover the sides of cabinets and cable managers with side panels. Use a single Therma-Stop Brush Side Panel in between Enhanced SteelFrame Cabinet and the External Cable Manager. Therma-Stop Brush Side Panels allow cables to pass easily between the cabinet and manager but keep air flowing through the cabinet. Use Solid Side Panels on the ends of cabinet bays. Side panels include keyed locks.

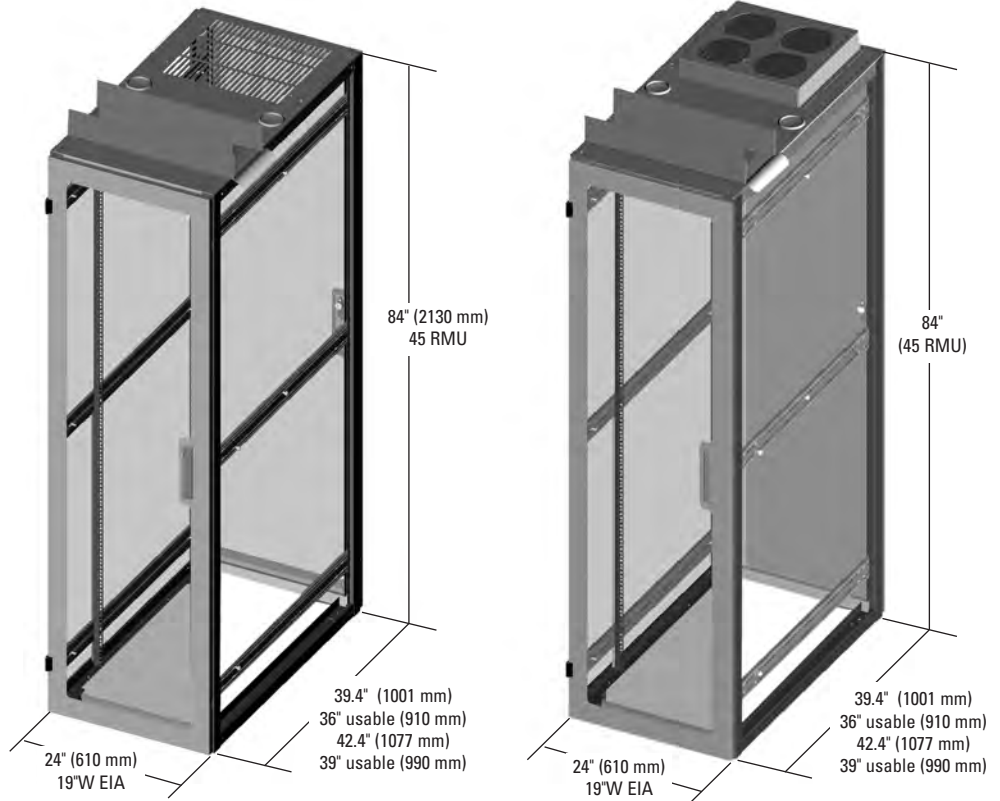
See inside for product details. Contact CPI Technical Support for configuration assistance.



SPECIFICATIONS

- Freestanding equipment cabinet provides front and rear support for 19"W EIA rack-mount equipment
- For indoor use only, in environmentally controlled areas; may not be used outdoors, in harsh environments or in air-handling spaces
- Available Sizes:  
Height: 84" (2130 mm)  
Width: 24" (610 mm), 19" EIA rack-mount  
Depths: 39.4" (1001 mm) or 42.4" (1077 mm)
- Usable Space:  
Width: 19" EIA rack-mount  
Height: 45 RMU  
Depth: 36" (910 mm) or 39" (990 mm)
- Doors:  
- Includes front and rear doors with swing handle latches and keyed locks  
- Doors swing open 180°, are removable and reversible front-to-rear  
- Perforated door is 63% open to meet equipment airflow specifications  
- Upgrade to electronic locks with the CPI Electronic Locking System
- Side Panels:  
Order separately; use Solid Side Panels or Thermo-Stop Brush Side Panels
- Top Panel:  
- Vented with two cable ports  
- Includes removable jumper trough  
- Accepts accessory Intelligent Fan Kit (included on High kW version)  
- Pre-drilled for 12"W (300 mm) Cable Runway (parallel orientation)
- Cable Access:  
(2) 3" (80 mm) diameter openings on cabinet top panel
- Cable Capacities:  
See the cable fill table at [www.chatworth.com/cablefill](http://www.chatworth.com/cablefill)
- Equipment support:  
2 pairs of L-shaped equipment mounting rails in the cabinet body  
- 19"W, EIA-310-D compliant  
- Universal hole pattern, 5/8"-5/8"-1/2" (15.9 mm-15.9 mm-12.7 mm) vertical hole spacing  
- 1-3/4" (44.45 mm) rack-mount spaces, marked and numbered on rails  
- Square-punched holes, accepts cage nuts  
- Depth-adjustable 3" (80 mm) to 36" (910 mm) or 39" (990 mm), infinite adjustment on sliding rail  
Integral Air Dam blocks airflow around the side of the cabinet  
Includes #12-24 and M6 cage nuts and screws
- Vertical Cable Management: Order separately.
- Load capacity: 2,000 lb (907.2 kg)
- Certifications: EIA-310-D compliant
- Material: Steel sheet cabinet body, top panel, front and rear door; aluminum extrusion rail supports
- Construction: Welded and bolted
- Finish: Epoxy-polyester hybrid powder coat paint in black, gray or computer white

CABINET DIMENSIONS



Low kW Cabinet

Low kW Cabinet Includes:

- (1) Four-Post Frame
- (4) Vertical Mounting Rails
- (1) Integral Air Dam
- (1) Quick-Release Perforated Front Door
- (1) Quick-Release Perforated Rear Door
- (1) Jumper Trough

High kW Cabinet

High kW Cabinet Includes:

- (1) Four-Post Frame
- (4) Vertical Mounting Rails
- (1) Integral Air Dam
- (1) Quick-Release Perforated Front Door
- (1) Quick-Release Solid Rear Door
- (1) Jumper Trough
- (1) Intelligent Fan Kit

ORDERING INFORMATION

36" D (910mm) Enhanced SteelFrame Cabinet		
Part Number	Description	Shipping Weight
16141-X01	Low kW, Perforated Rear Door	192 lb (87.1 kg)
16141-X02	High kW, Solid Rear Door, Top Fan	212 lb (96.2 kg)

x=color: 1=Gray, 2=Computer White, 7=Black

39" D (990 mm) Enhanced SteelFrame Cabinet		
Part Number	Description	Shipping Weight
16142-X01	Low kW, Perforated Rear Door	200 lb (90.7 kg)
16142-X02	High kW, Solid Rear Door, Top Fan	221 lb (100.2 kg)

x=color: 1=Gray, 2=Computer White, 7=Black

CABINET ACCESSORIES



Six inch version shown without doors.

**External Cable Manager**

- Attach to the side of Enhanced SteelFrame Cabinet
- Creates vertical and front-to-rear cable pathways
- T-shaped cable fingers guide cables
- Vertical cable openings align with rack-mount spaces in the cabinet
- Solid bottom with brushed cable access
- Top is open over the front and rear vertical manager
- Includes solid locking front and rear doors

36" D (910 mm) External Cable Manager		
Part Number	Description	Shipping Weight
16144-X50	External Cable Manager, 6"W x 36"D (150 mm x 910 mm)	111 lb (50.3 kg)
16145-X50	External Cable Manager, 12"W x 36"D (300 mm x 910 mm)	127 lb (57.6 kg)

39" D (990 mm) External Cable Manager		
Part Number	Description	Shipping Weight
16144-X40	External Cable Manager, 6"W x 39"D (150 mm x 990 mm)	114 lb (51.7 kg)
16145-X40	External Cable Manager, 12"W x 39"D (1300 mm x 990 mm)	131 lb (59.4 kg)

x=color: 1=Gray, 2=Computer White, 7=Black

Dimensions and Usable Area			
Size	Width	Depth	Area
6"W (150 mm)	3.5" (89 mm)	9.7" (246 mm)	34.0 in <sup>2</sup> (21 940 mm <sup>2</sup> )
12"W (300 mm)	9.4" (239 mm)	9.7" (246 mm)	91.2 in <sup>2</sup> (58 840mm <sup>2</sup> )

Note: There are two cable troughs in each manager.

Estimated Cable Fill (50% fill)			
Size	Cat 5e	Cat 6	Cat 6a
6"W (150 mm)	447	228	217
12"W (300 mm)	1200	772	584

Note: Cable Fills are for each trough.



**Solid Side Panel**

- Attach to the side of Enhanced SteelFrame Cabinet or External Cable Manager
- Provides added security and enhanced airflow by enclosing the cabinet and manager
- Includes a keyed lock

Solid Side Panel		
Part Number	Description	Shipping Weight
12612-X50	Locking Solid Side Panel, 36" D (910 mm)	39 lb (17.7 kg)
12612-X40	Locking Solid Side Panel, 39" D (990 mm)	44 lb (20.0 kg)

x=color: 1=Gray, 2=Computer White, 7=Black



**Therma-Stop Brush Side Panel**

- Attach to the side of Enhanced SteelFrame Cabinet or External Cable Manager
- Provides added security and enhanced airflow by enclosing the cabinet and manager
- Includes a keyed lock
- Brush panels have a front and rear brush opening for cables

Therma-Stop Brush Side Panel		
Part Number	Description	Shipping Weight
16143-X50	Locking Brush Side Panel, 36" D (910 mm)	63 lb (28.6 kg)
16143-X40	Locking Brush Side Panel, 39" D (990 mm)	68 lb (30.8 kg)

x=color: 1=Gray, 2=Computer White, 7=Black



**Snap-In Filler Panel**

- Use in Enhanced SteelFrame Cabinet to close open rack-mount spaces
- Available in 1 RMU and 2 RMU heights

Filler Panel		
Part Number	Description	Shipping Weight
34537-001	Filler Panel, 19"W x 1 RMU, Black	1 lb (0.5 kg)
34538-001	Filler Panel, 19"W x 2 RMU, Black	2 lb (0.9 kg)



**Intelligent Fan Kit**

- Attach to the top of Enhanced SteelFrame Cabinet
- Removes hot air from the rear of the cabinet
- Use with a solid door
- Is included with the High kW Cabinet
- Fan has an IEC320 C-14 power inlet
- Includes a detachable power cord with a NEMA 5-15P plug

Intelligent Fan Kit		
Part Number	Description	Shipping Weight
16146-701	Intelligent Fan Kit, Black, 940 CFM	14 lb (6.4 kg)



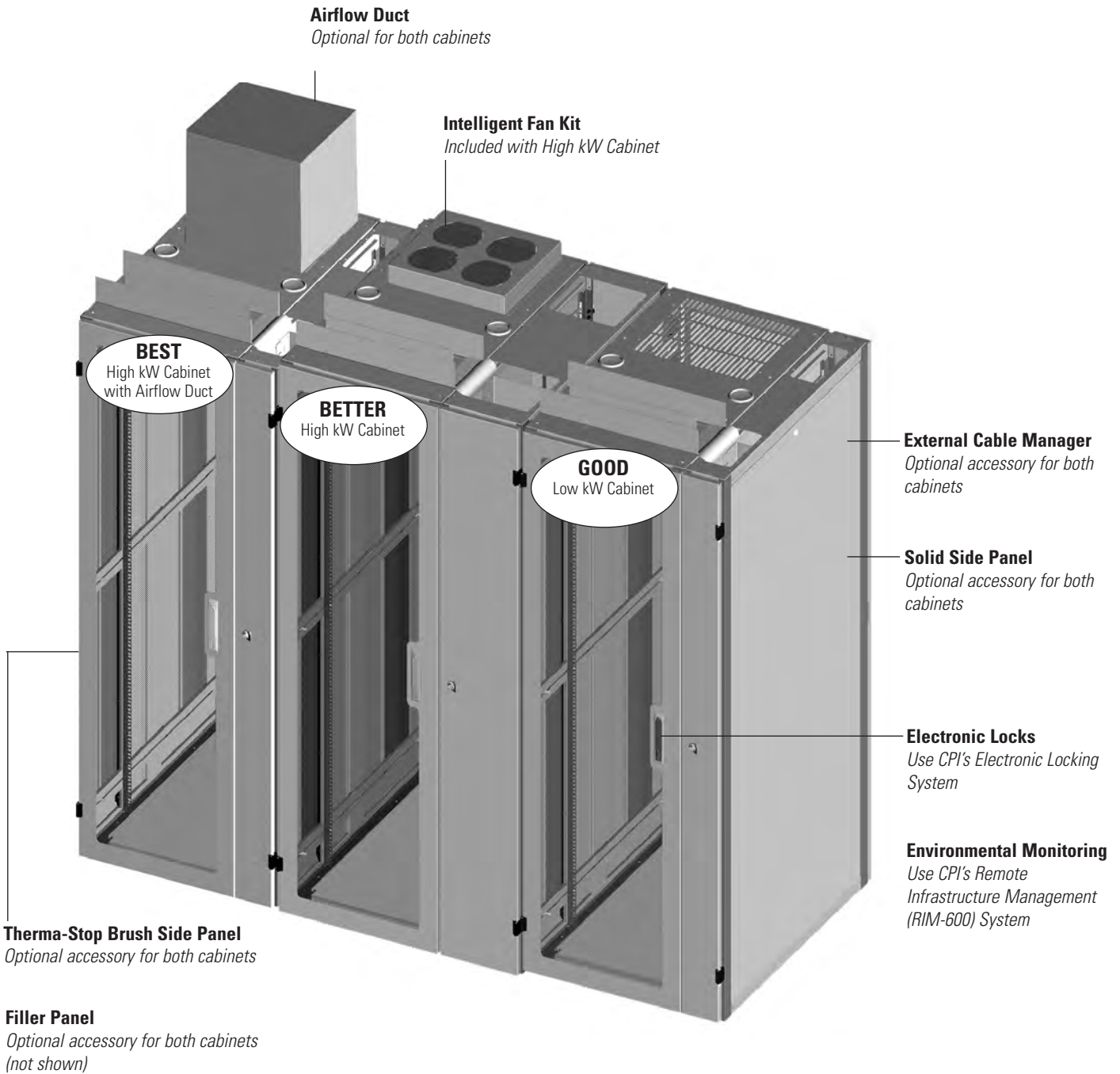
**Airflow Duct**

- Attach to the top of Enhanced SteelFrame Cabinet
- Ducts hot air between the top of the cabinet and a drop ceiling plenum
- Can be used with or without Intelligent Fan Kit
- Duct is 17.9"W x 16.7"D (455 mm x 424 mm) with an integral area of 272 in<sup>2</sup> (175 500 mm<sup>2</sup>)
- Telescoping duct extends between 24" and 46" high (610 mm and 1170 mm)

Airflow Duct		
Part Number	Description	Shipping Weight
16148-X00	Airflow Duct	38 lb (17.2 kg)

x=color: 1=Gray, 2=Computer White, 7=Black

SOLUTION OVERVIEW



Combine Enhanced SteelFrame Cabinet, Therma-Stop Brush Side Panel, External Cable Manager and Solid Side Panel to create multi-cabinet bays. Add Snap-In Filler Panels to open rack-mount spaces. Use Airflow Duct for maximum cooling. Electronic locks and environmental monitoring can be added to both cabinets with CPI's Electronic Locking System and Remote Infrastructure Monitoring (RIM-600) System .

Accessory features and part numbers on page 3.