



**TRI-MAG, Inc.**  
® *your* POWER Specialists

1601 N. CLANCY CT. • VISALIA, CA 93291  
(559) 651-2222 • FAX (559) 651-0188  
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## 590ATX

### Industrial Computer Chassis for ATX Motherboards

#### FEATURES

- Made in the USA
- Modular Design
- Rack & Desk Models
- Rack Version Meets EIA RS-310C
- RUGGED, Heavy gage, Aluminum Construction
- Excellent Cooling
- TWO Fans Standard
- Intake Air Filter
- Positive Air Pressure
- Accepts ATX, MiniATX and MicroATX MotherBoards
- Fits Standard ATX I/O Shields
- Accepts Tall Cards
- ISA/PCI Card Hold Down Bar
- Removable Front Drive Bay
- Removable Buried Shockmount Bracket Holds One 3½ Hard Drives
- 300W Switching Supply, UL, TUV, CE, Field Replaceable
- 115/230 and DC input Operation
- Reasonably Priced

#### OPTIONS/ACCESSORIES

- 300W Switching Supply
- Black or Off White Paint
- Locking Drive Door and 2 Stage Air Filter
- Slider for Rackmount
- Drive Bay Cover Plates
- 3½ to 5¼ Drive Adapters
- Semi Custom Modification By Using Wide Range of Stock Modular Panels
- Custom Modifications
- Hot Swap ATX Supply 250W (400W) or 320W



#### DESCRIPTION

590ATX is a high quality, modular PC chassis for ATX form factor motherboards. It provides a rugged, well-cooled enclosure for server, telecom, factory automation and other industrial applications. Both desktop and EIA RS-310 compatible rackmount versions are available.

590ATX features simple, sturdy mounting for drives and motherboard. Both drive and board mounting brackets are removable from the chassis for easy system assembly. The front drive bracket accepts one 3½ and up to 2 5¼ accessible devices. An internal bracket holds one 3½ device.

An adjustable card hold down clamp keeps ISA/PCI io cards firmly in position.

Two fans, working in push-pull, move large quantities of air through the chassis to provide cooling. Incoming air is filtered by a large, easily accessible, washable filter element. Positive pressure is maintained in the chassis to reduce dust incursion.

Three high quality, agency recognized field replaceable power supplies are available. The standard supply is rated 250W. A 300W or Hot swap is optional.

#### CUSTOMIZING

See Inside Back Cover for a Customizing guide.

The standard chassis shown in the accompanying photos and drawings will fill a large number of applications. However, the modular 590ATX design allows fast, easy, low cost modification to customer requirements by using our library of Modular Panels.

Stock Modular Panels are shown on pages 5 through 6. Accessories are shown on Page 7.

Panels may also be changed on older 590ATX's to install some new feature.

If requirements dictate modifications other than those available as library items, we can usually provide low cost solutions. We invite you to contact us.

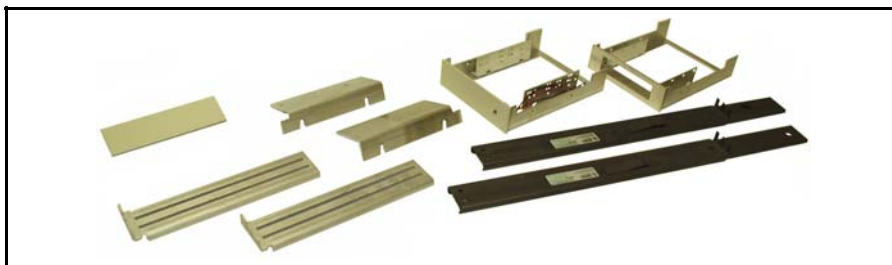
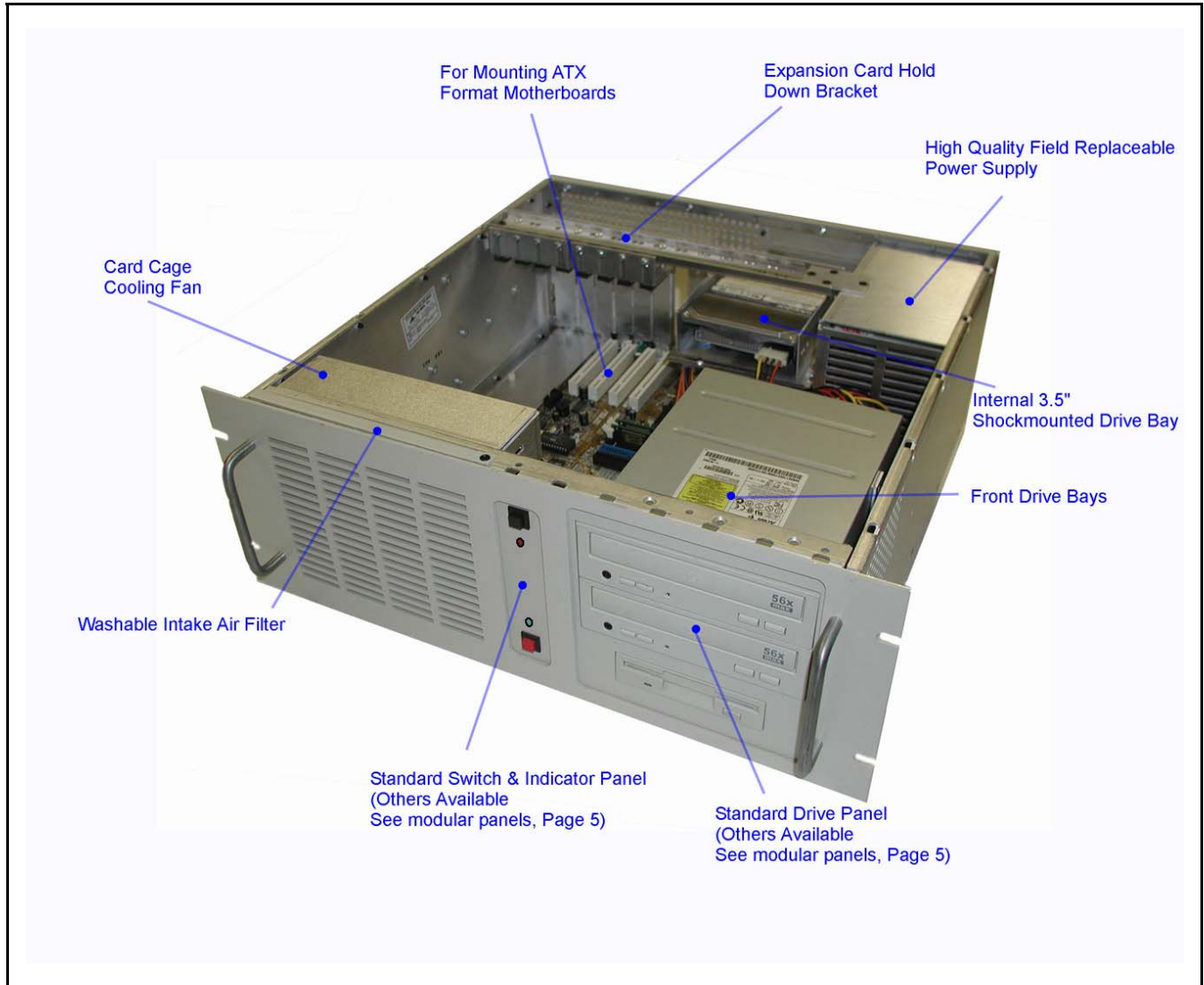




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## 590ATX



**Accessories**  
See Page 7.



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## 590ATX

PS MODEL	Input voltage	DC OUTPUT RATINGS								PS Safety Approvals
		Watts	+5V	+3.3V	+12V1	+12V2	-5V	-12V	+5Stdby	
-2A	117/230 VAC	250	25A	14A	10A	N/A	0.5A	0.5A	0.75A	UL, TUV, CSA, CE
-3A		300	30A		12A					
-35AP4		350	30A	28A	15A			3A		
-45AP4		450	45A	40A	10A			1A	2A	
-8A	-48VDC	250	25A	14A	N/A	0.5A	0.5A	1A		
-9A	+24VDC	250	25A				15A	1.0A	0.75A	
-12A	+12VDC	250	30A	22A			8A	0.5A	0.72A	
-6ARP4 Hot Swap/ Redundant	117/230 VAC	370	40A	20A			25A	1.0A	1.5A	
-8ARP4 Hot Swap/ Redundant	-48VDC	300	30A	16A			1.0A	1.5A		

### SPECIFICATIONS

#### Input Voltage

- See Table Above

#### DC Outputs

- See Table Above

#### Temperature

- 10 to 40°C internal Operating, -20 to 70°C Storage

#### Humidity

- 20 to 85% Operating, Non Condensing

#### PS MTBF

- 100,000 hrs @ 25°C, Demonstrated

#### Size

- Rackmount: 4U (7") x 19" Panel x 17.5D

#### Weight

- 20 pounds, 30 UPS shipping

#### Finish (External Surfaces Painted)

- Rackmount: Rack panel textured, other surfaces smooth

### ORDERING GUIDE

M590ATX-R - [ ] - [ ]

#### Power Supply

2A = 250W  
 3A = 300W  
 35AP4 = 350W  
 45AP4 = 450W

8A = 250W, -48VDC Input  
 9A = 250W, +24VDC Input  
 12A = 250W, +12VDC Input

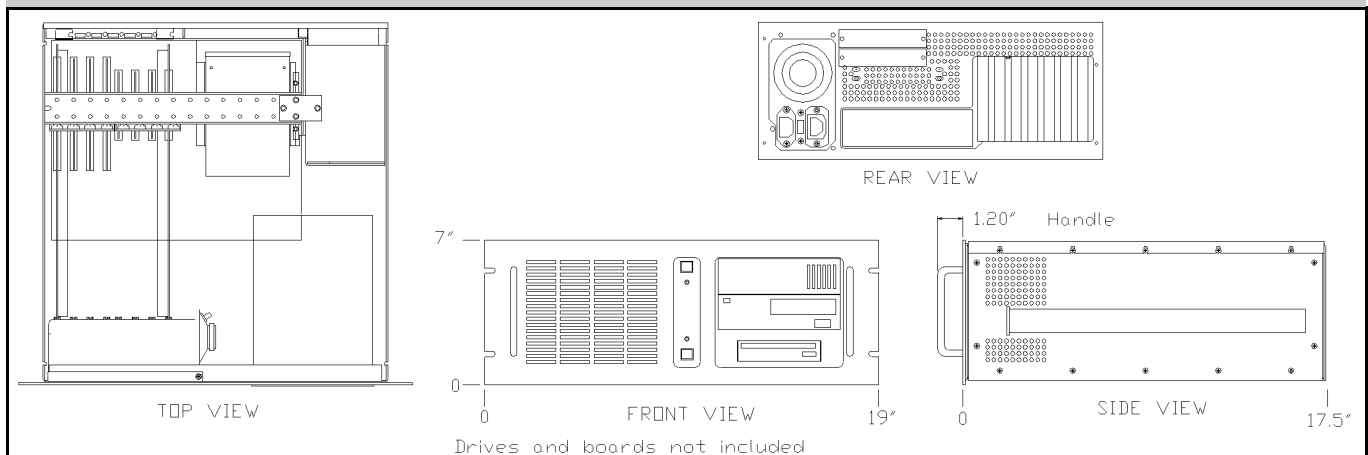
6ARP4 = 370W, Hot Swap/Redundant, P4  
 8ARP4 = 300W, -48VDC Input, Hot Swap/Redundant, P4

#### Cabinet Color

B = Black  
 W = Off White

#### MODEL

M590ATX-R-2A-B  
 M590ATX-R-3A-B  
 M590ATX-R-35AP4-B  
 M590ATX-R-45AP4-B  
 M590ATX-R-8A-B  
 M590ATX-R-9A-B  
 M590ATX-R-12A-B  
 M590ATX-R-6ARP4-B  
 M590ATX-R-8ARP4-B



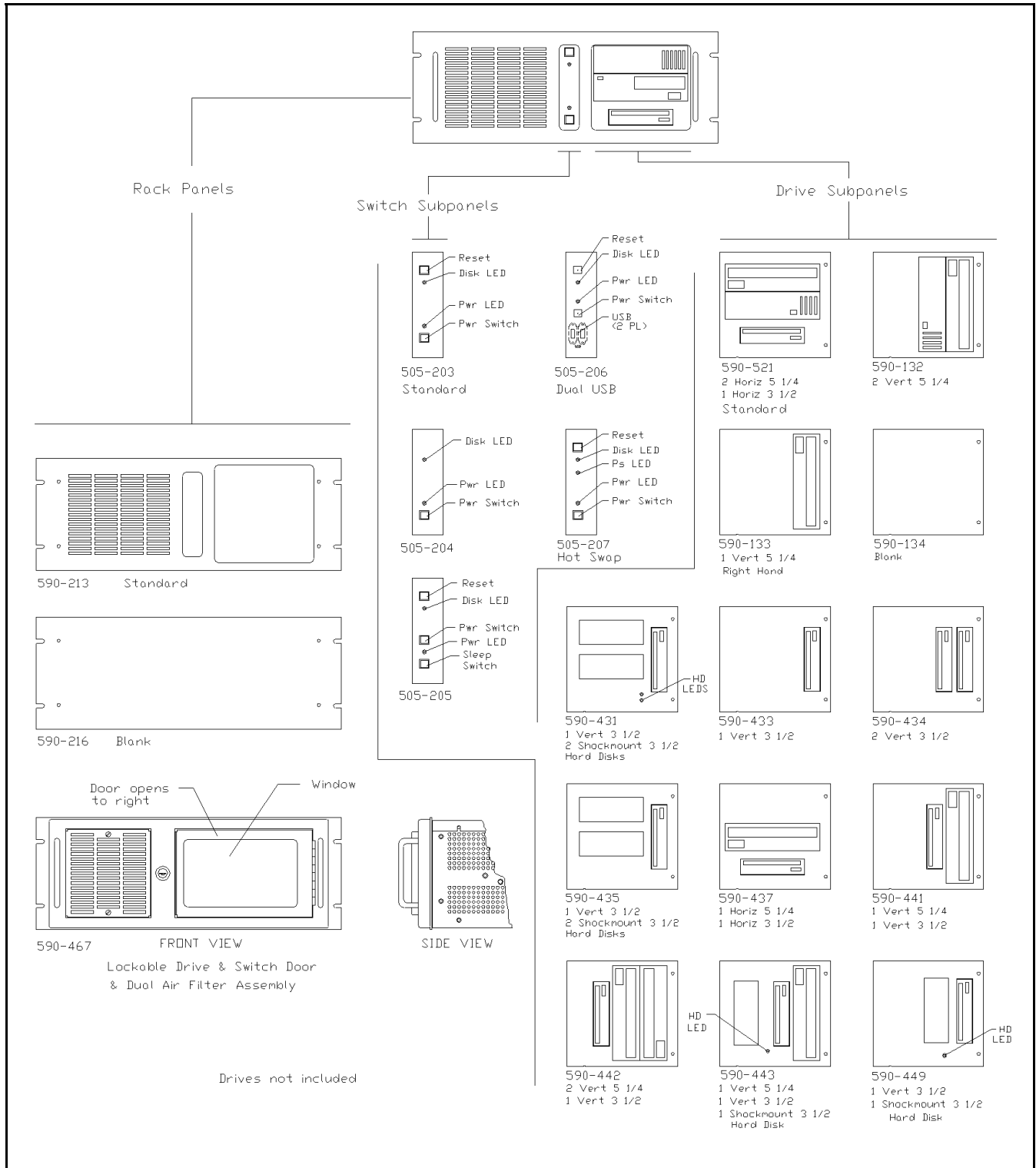
All specifications and prices subject to change without notice



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## 590ATX – Modular Panels

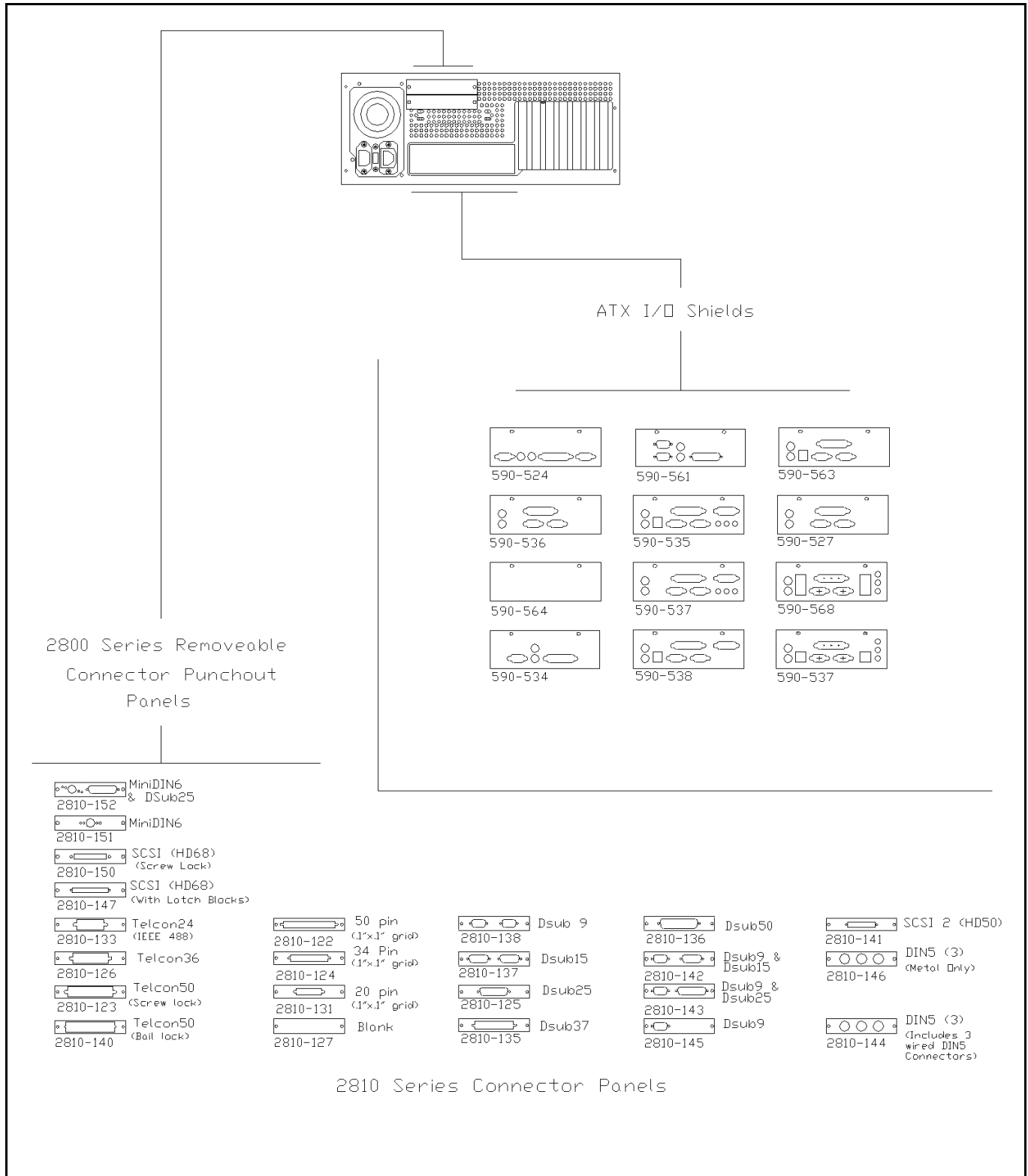




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## 590ATX – Modular Panels





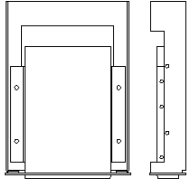
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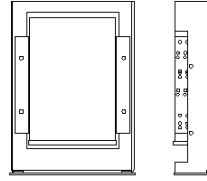
## 590ATX Series – Accessories

### DRIVE ADAPTERS

ADAPTS 3 1/2 DRIVES TO 5 1/4 FOOTPRINT



505-335  
 3 1/2 FLOPPY DRIVE ADAPTER  
 FITS 25MM (1") HIGH DRIVES



SEE TABLE FOR P/N  
 3 1/2 HARD DRIVE ADAPTER

PART NUMBER	ADAPTER TYPE	DRIVE ACTIVITY DRIVE CONNECTOR
505-340-1	NON-SHOCK MOUNT	0.1" GRID
505-340-2	MOUNT	2MM GRID
505-345-1	SHOCK MOUNT	0.1" GRID
505-345-2	MOUNT	2MM GRID

### DRIVE COVER PLATES



FRONT VIEW - Half HI



FRONT VIEW - Full HI

5 1/4 HORIZ Mount	
PART #	SIZE
590-450	HALF HI
590-455	FULL HI

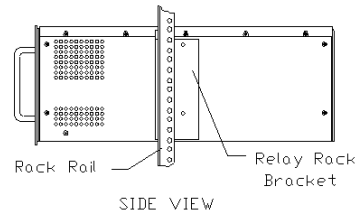
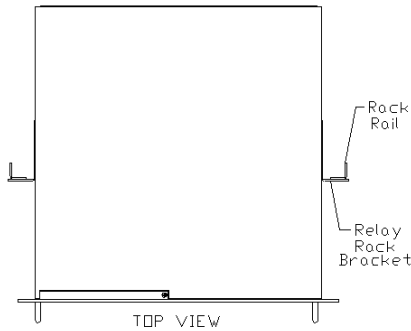
5 1/4 VERT Mount	
PART #	SIZE
590-345	HALF HI
590-340	FULL HI

3 1/2 VERT or HORIZ	
PART #	SIZE
520-230	1ea 25mm
520-235	2ea 25mm

### RELAY RACK BRACKETS

Mount rack chassis to "relay rack"  
 (Single set of 19" vertical rails)

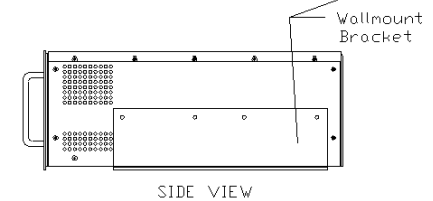
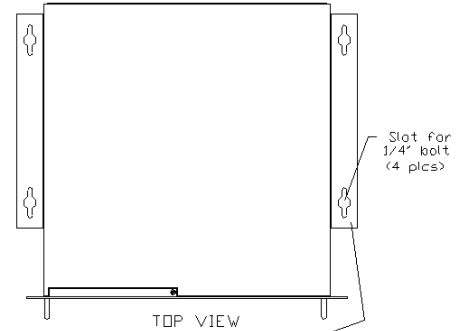
590-325/Pr.



### WALL MOUNT BRACKETS

Attach rackmount chassis to  
 wall or other flat surface

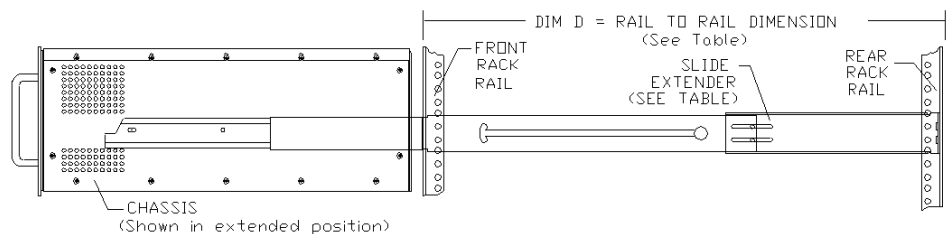
590-320/Pr.



### SLIDES & EXTENDERS

EXTENDER TABLE	
DIM D	EXT P/N
17.2 TO 24.3	590-380
24.3 TO 32.3	590-382

Slide for 590 Series	
SLIDE#	PAIRS
SLIDE160	1 PAIR



Drives not included