



Middle Atlantic Products, Inc.®

middleatlantic.com

MRK Series Enclosure



EIA/TIA Compliant

SEISMIC CERTIFIED

C(UL) US LISTED

The MRK Series 19" gangable enclosures. Narrow design for large multi-bay jobs

Features

- Fully welded construction
- 2,500 lb. weight capacity
- 1/8" thick structural steel internal braces
- 22" OD width with multiple depths available
- 1/2", 3/4", 1" & 1-1/2" electrical knockouts on split rear plates top & bottom, easily removable for cable pass-through, top plates additionally include UHF/VHF knockouts
- Two wide pairs of 11-gauge, 10-32 threaded rackrail with numbered rackspace increments
- Keylocked solid rear door standard, optional vented rear door available
- Optional solid, fully vented, plexi and vented plexi front doors available
- Open top with configurable top panel options
- Durable black textured powder coat finish
- Seismic certified (when used with MRK-Z4 option) with an Ip value of 1.5
- UL Listed in the US and Canada



MRK-4426

Architects' and Engineers' Specifications

EIA compliant 19" gangable equipment rack shall be Middle Atlantic Products model # MRK-___ (refer to chart). Overall dimensions shall be ___"H x ___"W x ___"D (refer to chart). Useable height shall be ___ rackspace, useable depth shall be ___" (refer to chart). Fully welded construction shall provide a 2,500 lb. weight capacity. Rack shall be constructed of the following materials: top and bottom shall be 14-gauge steel, horizontal braces shall be 16-gauge steel, rear door shall be 18-gauge steel and all structural elements shall be finished in a durable black powder coat. Rack shall come equipped with two pairs of 11-gauge steel rackrail with tapped 10-32 mounting holes in universal EIA spacing, black e-coat finish and numbered rackspace. The MRK shall have a solid locking rear door. Rack shall have removable split rear knockout panels with 1/2", 3/4", 1" and 1-1/2" electrical knockouts and top BNC knockouts for UHF/VHF antennae. Grounding and bonding stud shall be 1/4-20 threaded, installed in base of enclosure. MRK Series enclosures shall satisfy the 1997 UBC and 2001 CBC Seismic Zone 4 and the 2000 IBC, 2003 IBC, 2002 ASCE Standard 7 and 2003 Ed. NFPA 5000 Seismic Use Group III lateral force requirements for protecting 900 lbs. of essential equipment in upper floor installations when used in conjunction with the MRK-Z4 seismic floor anchor brackets with an Ip value of 1.5. Rack shall be OSHPD approved for fixed equipment anchorage in California healthcare facilities. Rack shall be UL Listed in the US and Canada. MRK enclosure shall be warranted to be free from defects in material or workmanship under normal use and conditions for the lifetime of the rack.

OPTIONS

- Front doors shall be reinforced 16-gauge steel, model # FD-x (solid), VFD-x (vented, 22% open area), LVFD-x (vented, 64% open area), PFD-x (plexi), PVFD-44 (vented plexi) (x = # of rackspace)
- Vented rear doors shall be 16-gauge steel, model # MW-VRD-44 (vented top and bottom), MW-LVRD-x (vented, 64% open area, excludes 24 and 37 space rack) (x = # of rackspace), MW-CLVRD-44 (split rear door, vented, 76% open area)
- Removable keylocked side panels shall be constructed of 16-gauge steel with recessed lift handles, model # SPN-x-(267/312/36/423) (x = # of rackspace), 267 = 26-1/2" cabinet depth, 312 = 31-1/2" cabinet depth, 36 = 36" cabinet depth, 423 = 42" cabinet depth
- Top panels shall be 16-gauge steel, multiple styles available including model # MW-ST (solid), MW-10FT (10" fan), MW-4FT (four 4-1/2" fans), MW-6FT (three 6" fans), MW-VT (vented), MW-LA (accepts 6" and 12" wide cable ladders) and MV-PVT (26/31/36/42) (Vented pagoda adds 1.41" to top of rack)
- Caster base shall add 1" to overall height, featuring four casters with a 1,300 lb. weight capacity, UL Listed in the US and Canada. Model # CBS-MRK-x (x = cabinet depth)
- Fine floor friendly caster base shall have a 700 lb. weight capacity. Model # CBS-MRK-xR (x = cabinet depth)
- Rail bracket adapters shall allow for mounting of panels vertically between rackrail brackets. Available for 44 space enclosures. Model # RBA-MV44-x (x = 1, 2 or 3 rackspace)
- Seismic Zone-4 and Seismic Use Group III compliancy floor anchor kit shall be model # MRK-Z4
- Slide-out AXS enclosure option available (See AXS Spec sheet # 96-0555)

customizable specification clips available at middleatlantic.com

Engineered Mounting Solutions

US: New Jersey ▪ California ▪ Illinois ▪ Voice: 973-839-1011 Fax: 973-839-1976 ▪ middleatlantic.com
Canada: Ontario ▪ British Columbia ▪ Voice: 613-836-2501 Fax: 613-836-2690 ▪ middleatlantic.ca

MRK Configured A/V Enclosure



EIA/TIA Compliant

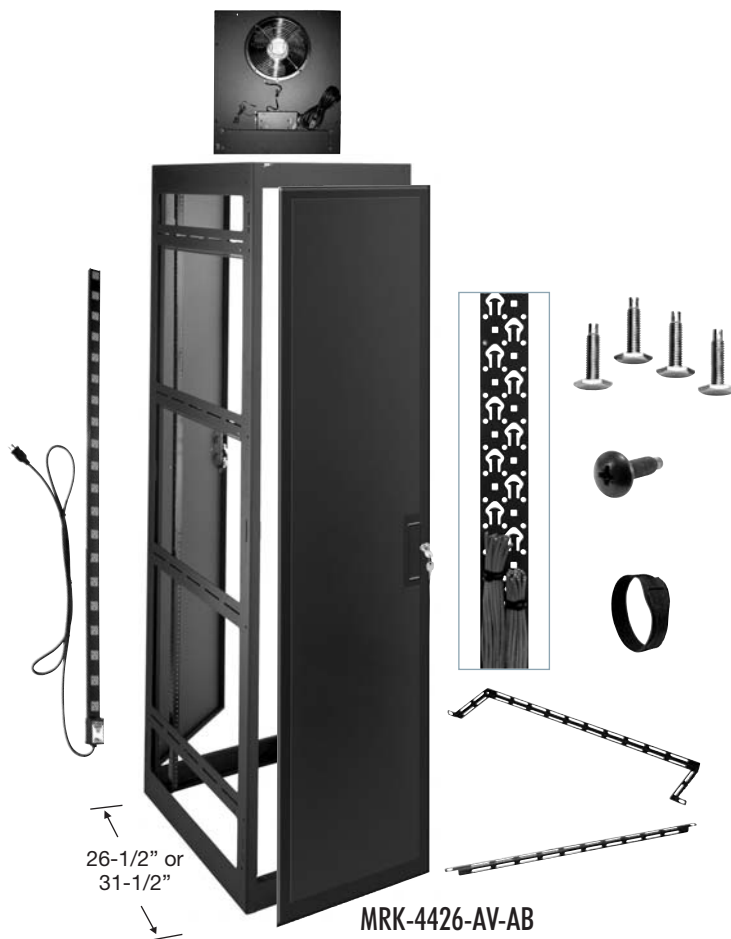
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Configured A/V enclosure ships complete with the most commonly used accessories

Includes

- Integrated fan top with proportional speed fan controller
- Configurable rear door with bottom vent, solid locking front door
- 3-1/4" wide, 44 space vertical lacer strip
- Six horizontal lacer bars
- Twelve 8" Velcro® cable management straps
- Thin power strip, 20 Amp, 20 outlet with cord
- Leveling feet
- 100 qty. 10-32 mounting hardware
- Available with or without sides
- Ganging hardware available for add-a-bay models without sides



Architects' and Engineers' Specifications

EIA compliant 19" gangable equipment rack shall be Middle Atlantic Products model # MRK-___-AV (refer to chart). Overall dimensions of rack shall be 83-1/8" H x 22" W x ___" D (refer to chart). Useable height shall be 44 rackspaces, useable depth shall be ___" (refer to chart). Fully welded construction shall provide a 2,500 lb. weight capacity. Rack shall be constructed of the following materials: top and bottom shall be 14-gauge steel, horizontal braces shall be 16-gauge steel, solid front door shall be 18-gauge steel and rear door shall be 18-gauge steel and all structural elements shall be finished in a durable black powder coat. Rack shall come equipped with two pairs of 11-gauge steel rackrail with tapped 10-32 mounting holes in universal EIA spacing, black e-coat finish and numbered rackspaces. Rack shall include 100 qty. 10-32 mounting screws. Rack shall be equipped with one vertical lacer strip, Middle Atlantic Products model # LACE-44-OP. The LACE-44-OP is 3-1/4" wide and the useable height is 44 rackspaces. Rack shall also include four 'L' shaped straight and two 4" offset horizontal lacer bars and twelve, 8" Velcro® straps for cable management. The MRK shall have a solid locking rear door. Models intended for ganging (MRK-___-AV-AB) (refer to chart) shall include ganging hardware for multi-bay installations. Rack shall feature integrated fan top, Middle Atlantic Products model # MW-10FT-FC for active thermal management. MW-10FT-FC shall feature proportional speed fan control and maximum airflow shall be 550 CFM. Rack shall have removable split rear knockout panels with 1/2", 3/4", 1"

and 1-1/2" electrical knockouts and top BNC knockouts for UHF/VHF antennae. Grounding and bonding stud shall be 1/4-20 threaded, installed in base of enclosure. MRK Series enclosures shall satisfy the 1997 UBC and 2001 CBC Seismic Zone 4 and the 2000 IBC, 2003 IBC, 2002 ASCE Standard 7 and 2003 Ed. NFPA 5000 Seismic Use Group III lateral force requirements for protecting 900 lbs. of essential equipment in upper floor installations when used in conjunction with the MRK-Z4 seismic floor anchor brackets with an Ip value of 1.5. Rack shall be OSHPD approved for fixed equipment anchorage in California healthcare facilities. Rack shall include a high-density thin power distribution and shall be Middle Atlantic Products model # PDT-2020C-NS with 20 outlets and 20 amps. Thin power distribution shall be 72-3/4" long x 1" deep x 1.9" wide. J-Box shall be 2" deep x 2" wide. Thin power distribution shall feature 20 NEMA 5-20R outlets. Corded power strip includes 20-amp protection and mounting hardware. Corded model shall be terminated with 10 foot power cord and NEMA 5-20P plug. PDT Series shall feature a black anodized finish. MRK and PDT Series shall be UL Listed in the US and Canada. MRK-___-AV shall be RoHS EU Directive 2002/95/EC compliant. PDT-2020C-NS and MW-10FT-FC shall be warranted to be free from defects in material or workmanship under normal use and conditions for a period of 3 years. MRK enclosure shall be warranted to be free from defects in material or workmanship under normal use and conditions for the lifetime of the rack.

MRK Configured NVR / DVR Enclosures



EIA/TIA Compliant

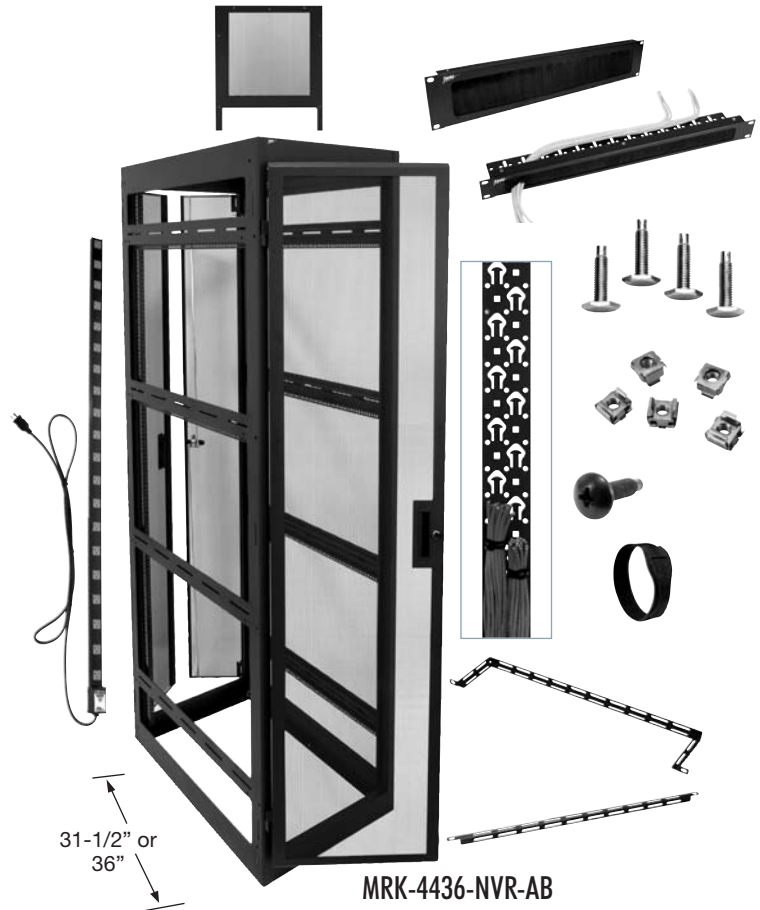
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Complete NVR / DVR enclosure addresses the cable and thermal management needs of both network and digital video recording devices

Includes

- Two pairs cage nut style rackrail (NVR enclosure)
- Two pairs 10-32 threaded rackrail (DVR enclosure)
- One pair of cage nut style Z-rail adapters (NVR enclosure)
- Fully vented top
- Fully perforated vented front door and vented split rear door
- 3-1/4" wide, 44 space vertical lacer strip
- Six horizontal lacer bars
- Twelve 8" Velcro® cable management straps
- Thin power strip, 20 Amp, 20 outlet with cord
- One each 1 space and 2 space brush grommet
- Leveling feet
- 100 qty. 6mm threaded cage nuts and rack screws (NVR enclosure)
- 50 qty. 10-32 threaded cage nuts and rack screws (NVR enclosure)
- 100 qty. 10-32 mounting hardware (DVR enclosure)
- Available with or without sides
- Ganging hardware available for add-a-bay models without sides



Architects' and Engineers' Specifications

EIA compliant 19" gangable equipment rack shall be Middle Atlantic Products model # MRK-___-DVR (NVR) (refer to chart). Overall dimensions of rack shall be 83-1/8" H x 22" W x ___" D (refer to chart). Useable height shall be 44 rackspaces, useable depth shall be ___" (refer to chart). Fully welded construction shall provide a 2,500 lb. weight capacity. Rack shall be constructed of the following materials: top and bottom shall be 14-gauge steel, horizontal braces shall be 16-gauge steel, perforated vented front door shall be 18-gauge steel and rear vented door shall be 18-gauge steel and all structural elements shall be finished in a durable black powder coat. Rack shall come equipped with two pairs of 11-gauge steel rackrail with tapped mounting holes in universal EIA spacing, black e-coat finish and numbered rackspaces. Rack shall include 100 qty. 10-32 mounting screws (DVR enclosure) or 100 qty. 6mm cage nuts and rack screws with 50 qty. 10-32 threaded cage nuts and rack screws (NVR enclosure). Rack shall be equipped with one vertical lacer strip, Middle Atlantic Products model # LACE-44-OP. The LACE-44-OP is 3-1/4" wide and the useable height is 44 rackspaces. Rack shall also include four 'L' shaped straight and two 4" offset horizontal lacer bars and twelve, 8" Velcro® straps for cable management. The MRK shall have a solid locking rear door. Models intended for ganging (MRK-___-___-AB) (refer to chart) shall include ganging hardware for multi-bay installations. Rack shall have removable split rear knockout panels with 1/2", 3/4", 1" and 1-1/2" electrical knockouts and top BNC knockouts for

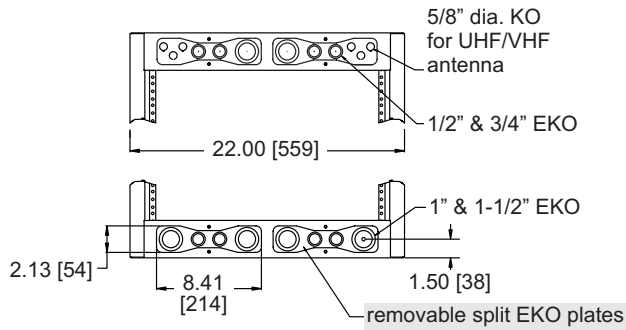
UHF/VHF antennae. Grounding and bonding stud shall be 1/4-20 threaded, installed in base of enclosure. MRK Series enclosures shall satisfy the 1997 UBC and 2001 CBC Seismic Zone 4 and the 2000 IBC, 2003 IBC, 2002 ASCE Standard 7 and 2003 Ed. NFPA 5000 Seismic Use Group III lateral force requirements for protecting 900 lbs. of essential equipment in upper floor installations when used in conjunction with the MRK-Z4 seismic floor anchor brackets with an Ip value of 1.5. Rack shall be OSHPD approved for fixed equipment anchorage in California healthcare facilities. Rack shall include a high-density thin power distribution and shall be Middle Atlantic Products model # PDT-2020C-NS with 20 outlets and 20 amps. Thin power distribution shall be 72-3/4" long x 1" deep x 1.9" wide. J-Box shall be 2" deep x 2" wide. Thin power distribution shall feature 20 NEMA 5-20R outlets. Corded power strip includes 20 amp protection and mounting hardware. Corded model shall be terminated with 10 foot power cord and NEMA 5-20P plug. PDT Series shall feature a black anodized finish. MRK and PDT Series shall be UL Listed in the US and Canada. MRK-___-DVR (NVR) shall be RoHS EU Directive 2002/95/EC compliant. PDT-2020C-NS shall be warranted to be free from defects in material or workmanship under normal use and conditions for a period of 3 years. MRK enclosure shall be warranted to be free from defects in material or workmanship under normal use and conditions for the lifetime of the rack.

MRK basic dimensions

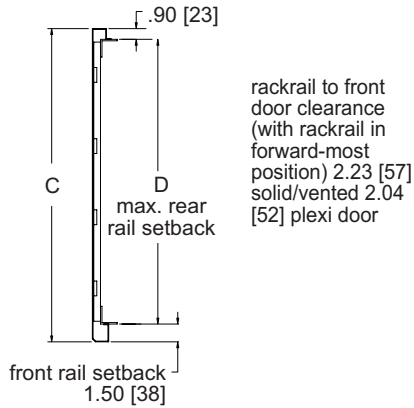


REAR VIEW TOP & BOTTOM

All dimensions in inches unless otherwise noted [All dimensions in brackets are in millimeters]



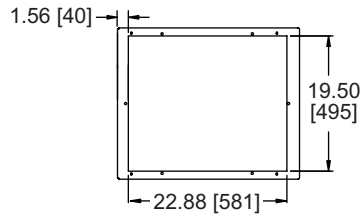
TOP VIEW OF MRK SIDE SECTIONAL DETAIL



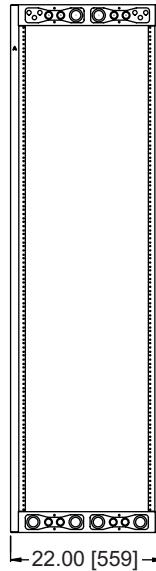
Part #	A Overall Height	B Useable Height	C Overall Depth	D Useable Depth
MRK-4426	83.125" [2112]	77.125" [1959]	26.40" [671]	24.00" [610]
MRK-4426-AV-AB*	83.125" [2112]	77.125" [1959]	26.40" [671]	24.00" [610]
MRK-4026	76.125" [1934]	70.125" [1781]	26.40" [671]	24.00" [610]
MRK-3726	70.875" [1800]	64.875" [1648]	26.40" [671]	24.00" [610]
MRK-2426	48.125" [1223]	42.125" [1070]	26.40" [671]	24.00" [610]
MRK-4431	83.125" [2112]	77.125" [1959]	31.40" [798]	29.00" [737]
MRK-4431-AV-AB*	83.125" [2112]	77.125" [1959]	31.40" [798]	29.00" [737]
MRK-4431-DVR-AB*	83.125" [2112]	77.125" [1959]	31.40" [798]	29.00" [737]
MRK-4031	76.125" [1934]	70.125" [1781]	31.40" [798]	29.00" [737]
MRK-3731	70.875" [1800]	64.875" [1648]	31.40" [798]	29.00" [737]
MRK-2431	48.125" [1223]	42.125" [1070]	31.40" [798]	29.00" [737]
MRK-4436	83.125" [2112]	77.125" [1959]	36.00" [914]	33.60" [853]
MRK-4436-NVR-AB*	83.125" [2112]	77.125" [1959]	36.00" [914]	33.60" [853]
MRK-4036	76.125" [1934]	70.125" [1781]	36.00" [914]	33.60" [853]
MRK-4442	83.125" [2112]	77.125" [1959]	42.00" [1067]	39.60" [1006]
MRK-4042	76.125" [1934]	70.125" [1781]	42.00" [1067]	39.60" [1006]

* Denotes that AV, DVR and NVR models are also available configured with optional side panels (remove AB suffix for part no. e.g. MRK-4426-AV). Side panels add 1-5/16" [33mm] to overall width of rack.

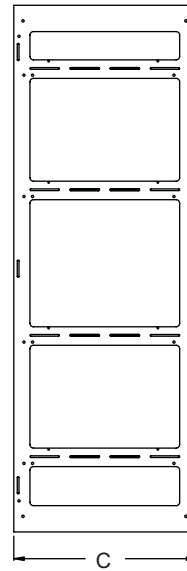
TOP VIEW



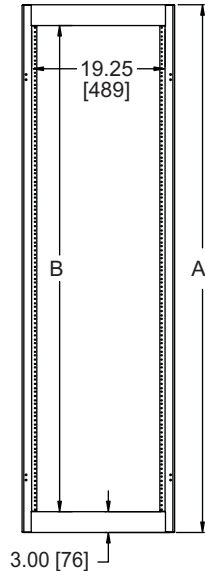
REAR VIEW



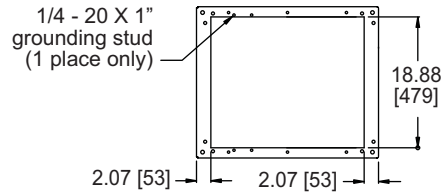
SIDE VIEW



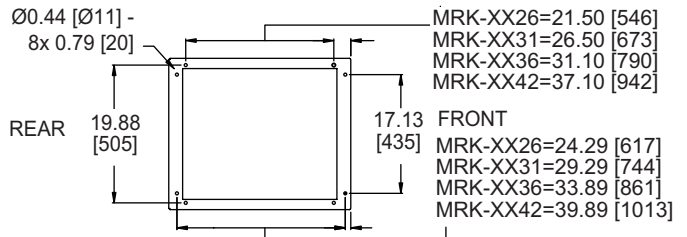
FRONT VIEW



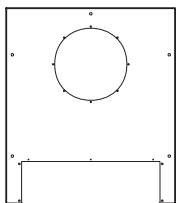
BOTTOM VIEW



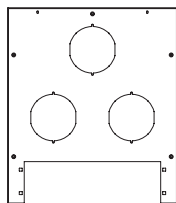
FLOOR MOUNTING LOCATIONS



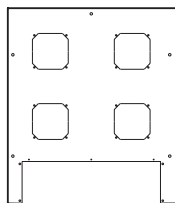
Top options (removable plate opening accommodates 2 space panel)



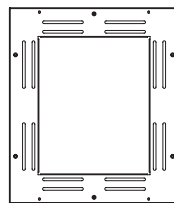
MW-10FT accepts 10" fan
MW-10FT-550CFM includes 10" fan
MW-10FT-FC includes 10" fan and fan controller (included with A/V enclosures)



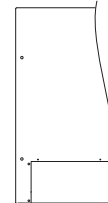
MW-6FT accepts 6" fans
MW-6FT-660CFM includes 6" fans



MW-4FT accepts 4-1/2" fans
MW-4FT-380CFM includes 4-1/2" fans
MW-4QFT-FC includes 4-1/2" quiet fans and fan controller



MW-LA accepts 6", 9" and 12" width cable ladder



MW-ST solid



MW-VT slot vent



MW-LVT large perf vent