



# Thermal Management

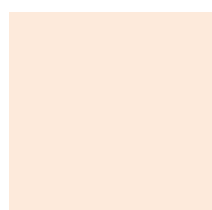
Thermal Management plays a critical role in overall system reliability because heat has been proven to substantially reduce the service life of most equipment.

Maintaining the recommended constant operating temperature for most equipment (max 29.5 Celsius) will help provide a long service life for the equipment inside an enclosure.





Why 29.5 Celsius? Most studies have shown that for every 10° rise, digital equipment life is reduced by approximately 40%!





IUQFP-4D



IUQFP-4RT



IUQFP-4DRA  
designer look and finish

IUQFP SERIES, ULTRA QUIET FAN PANELS

These award-winning premium cooling panels are quiet and effective. Ideal for cooling smaller systems in visible locations such as living spaces and AV studios. Designer versions also feature dimmable displays and have a black brushed and anodized finish.

- Compact two-space size saves rackspace
- Thermostatic, proportional speed fan control is quiet and saves energy
- Includes local and remote overtemp notification for system reliability
- Choice of black powder coat or black brushed and anodized finish

CERTIFICATIONS

- CE

240V PART #	RACKING HEIGHT	# OF FANS	OVERTEMP NOTIFICATION			USER DEFINABLE OVERTEMP SETTING	FAN FAILURE NOTIFICATION LOCAL & REMOTE DISPLAY	FREE AIR RATING	MAX SOUND LEVEL	FINISH	AESTHETICS
			LOCAL LED	LOCAL DISPLAY	REMOTE						
IUQFP-2	89mm (2 space)	2	✓	-	✓	-	-	50 CFM	24 dB	black powder coat	basic
IUQFP-2D	89mm (2 space)	2	✓	✓	✓	✓	✓	50 CFM	24 dB	black powder coat	basic
IUQFP-4	89mm (2 space)	4	✓	-	✓	-	-	100 CFM	27 dB	black powder coat	basic
IUQFP-4D	89mm (2 space)	4	✓	✓	✓	✓	✓	100 CFM	27 dB	black powder coat	basic
IUQFP-4DRA	89mm (2 space)	4		dimmable	✓	✓	✓	100 CFM	27 dB	black, brushed & anodized	designer
IUQFP-4RA	89mm (2 space)	4			✓			100 CFM	27 dB	black, brushed & anodized	designer

IQBP SERIES, QUIET BLOWER PANELS

This unique product series from Middle Atlantic uses a pair of our custom-designed blowers to move up to 100mm of cooling air quietly in only one rackspace! Intelligent proportional speed control, and high static pressure to maintain airflow even through crowded rackspace.



IQBP-2

- Compact one-space unit saves rackspace
- Choice of black powder coat or black brushed and anodized finish
- Half rack size available

CERTIFICATIONS

- CE

240V PART #	BLACK FINISH	# OF BLOWERS	MAX SOUND LEVEL	FREE AIR RATING	RACKING HEIGHT	OVERALL WIDTH
IQBP-2A	Anodized	2	32 dB	100 CFM	44mm (1 space)	483mm
IQBP-2	Flat	2	32 dB	100 CFM	44mm (1 space)	483mm



FTA-3

FTA SERIES, FAN TRAY SYSTEM

Locates fans directly above hot equipment to help supplement rack cooling systems by moving hot air in the right direction.

- Uses 102mm DC fans for quiet operation
- 8 fan mounting positions and optional add-on fan to position fans where needed
- Energy-saving thermostatic control
- Adjustable mounting range of 457-813mm
- Compact one-space unit saves rackspace
- Ideal for use with VRS vented rackmount shelf, pg. 196

240V PART #	DESCRIPTION	FREE AIR RATING
IFTA-3	3 fan tray	207mm
IFTA-6	6 fan tray	414mm

QUIET-COOL SERIES™, COMPONENT, CABINET AND CLOSET COOLING

Middle Atlantic offers this unique set of products called Quiet-Cool Series™, which was designed to provide effective thermal management for several specific installation environments. Every product in this series employs smart thermostatic control to save energy and reduce unnecessary noise.

COMPONENT COOLER

- Lays on top of hot components to move air

CERTIFICATIONS

- CE

240V PART #	DESCRIPTION	FREE AIR RATING	MAX SOUND LEVEL
ICOMP-COOL	1 fan, power supply	8mm	19 dB
ICOMP-COOL-3*	3 fans, connects to single power supply	8mm per fan	24 dB
ICOMP-COOL50	system activates automatically when needed	50mm	29 dB
ICOMP-COOL50P	platform, system activates automatically when needed	50mm	29 dB

\*914mm length between connectors



ICOMP-COOL50

CABINET COOLER

- Mounts inside small cabinets, credenzas, or similar enclosures to move air

CERTIFICATIONS

- CE

240V PART #	DESCRIPTION	FREE AIR RATING	MAX SOUND LEVEL
ICAB-COOL	cabinet cool system	20 CFM	24 dB
ICAB-COOL50	cabinet cool system	50 CFM	29 dB
ICAB-COOL-2	dual cabinet cool system	40 CFM	27 dB



ICAB-COOL50

CLOSET COOLER

- For small systems in enclosed closes

CERTIFICATIONS

- CE

240V PART #	DESCRIPTION	FREE AIR RATING	MAX SOUND LEVEL
ICLS-COOL1	active exhaust, passive intake	50 CFM	25 dB
ICLS-COOL2	active exhaust, active intake	50 CFM	28 dB



ICLS-COOL1

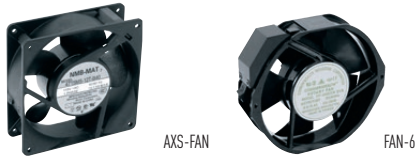


FANS, FAN KITS AND ACCESSORIES

Middle Atlantic offers a range of high quality fans and fan kits to let installers implement their selected thermal management strategy. Fan kits include fans, guards, and necessary vent blockers, and are designed for specific racks or usage locations such as for rear doors as noted. Some kit models also include intelligent thermostatic controls to save energy and minimize unnecessary noise.

- Fans are ball-bearing design for long life and quiet operation
- Fans include mounting hardware and cords
- Fan kits include fans, guards, and necessary vent blockers

FANS



PART #	VOLTAGE	SIZE	DEPTH	FREE AIR DB RATING	FREE AIR RATING
QFAN	120V	114mm	38mm	<30 dBA	50 CFM
FAN-10	120V	254mm	89mm	49 dBA	550 CFM
FAN-119	240V	114mm	38mm	39 dBA	95 CFM
QFAN-119	240V	114mm	38mm	<30 dBA	50 CFM

FAN KITS



PART #	APPLICATION	# OF FANS	FREE AIR RATING	OTHER ITEMS INCLUDED
IMFR-FANKIT-2	rear panel, fits MFR Series	2	50 CFM	power supply, 240V

FILTER PANEL



PART #	RACKING HEIGHT	DESCRIPTION
FILTER	133mm (3 spaces)	1" thick, washable fan filter panel

FAN GUARDS

PART #	FITS
GUARD	114mm fan
GUARD-10	254mm fan

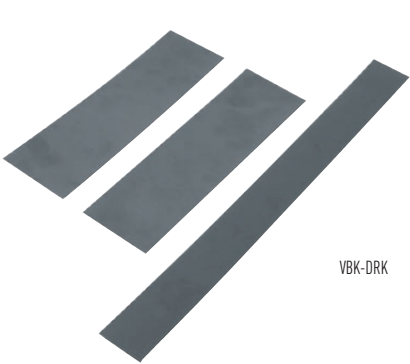


VBK SERIES, VENT BLOCKER KIT

Vent blockers prevent the recirculation of hot air between top-mount fans and nearby vent openings to ensure the heated air will be forced out through the top mounted fans.

- Kits include the properly sized blockers for the intended model

PART #	FITS
VBK-E20	ERK-xx20, DWR-xx-26
VBK-E28	ERK-xx28



FC SERIES, THERMOSTATIC AC FAN CONTROL

These controllers extend both equipment and fan life and reduce service calls by varying the fan speed of up to four fans based on temperature.

- Control up to four fans, depending on model
- 3 user-selected temperature ranges
- Includes temperature sensor with 1524mm cord
- ETL Certified

CERTIFICATIONS

- CE

PART #	DESCRIPTION	# OF FAN CONTROLLED OUTLETS
FC-4-1CA	mounts to rackrail brackets or any flat surface	4

