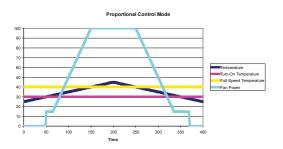
Intelligent Plenum Air Management Module

iPAMM User Manual

Intelligent Plenum Air Management Module

# 5 Temperature Control System (continued)



# 6 Trouble Shooting

### Hints and tips for effective iPAMM cooling:

- 1. Ensure that fan air intakes are clear.
- 2. Keep the front door of the cabinet closed.
- 3. Minimize cable clutter at the front of the equipment.
- 4. Ensure the vented section at the base of the front of the cabinet is unobstructed.
- 5. Ensure that both power inlets are plugged in.
- 6. Place the temperature sensor high in the cabinet near the rear door.
- 7. Set the "fan on temperature" (Min Temperature) as high as practical 25 C is recommended.
- 8. Set the "fan maximum temperature" (Max Temperature) as least 10 C above the "fan on temperature".
- 9. Blank off all vacant rack units in the cabinet. This maintains plenum pressure and forces cold air through the equipment, not around it.
- 10. Use the foam supplied to blank off the rear cable entry and prevent cold air from entering the rear of the cabinet. This will maintain and maximise the delivery of air from the plinth to the plenum.

## Front Display:

Enter a menu choice (1-5):

The front display contains four status LEDs and four alpha-numeric characters. Together, these can be used to determine the state of the iPAMM.

## 6 Trouble Shooting (continued)

### Front Display:

Enter a menu choice (1-5):

The front display contains four status LEDs and four alpha-numeric characters. Together, these can be used to determine the state of the iPAMM.



## Alpha Numeric Display:

During normal operation, the highest temperature of the two temperature sensors is shown. When a fault has been detected, this is replaced with an error code. Error codes are shown as ErrX where X indicates the error code. Note that if more than one fault condition is present, each error code will be displayed in sequence.

The following list contains the six possible error codes and a brief description of the

Error 0 - Controller A is reporting an invalid temperature. This can be a symptom of a disconnected temperature sensor.

Error 1 - Controller B is reporting an invalid temperature. This can be a symptom of a disconnected temperature sensor.

Error 2 - Fan A has a speed of zero while the duty cycle is not zero.

Error 3 - Fan B has a speed of zero while the duty cycle is not zero.

Error 4 - Controller A is not active. This may indicate a failed controller.

Error 5 - Controller B is not active. This may indicate a failed controller.

### Status LED's:

The four status LED's can be used to determine the following information.

- 1. If this light is flashing, controller A is active. If this light is not flashing, a fault may exist in the iPAMM.
- 2. If this light is flashing, controller B is active. If this light is not flashing, a fault may exist in the iPAMM.
- 3. If this light is flashing, the Ethernet controller (RMS) is active. If this light is not flashing, this may indicate a fault in the iPAMM. If no Ethernet controller (RMS) is installed, this light will remain off.
- 4. If this light is on a fault has been detected.

Intelligent Plenum Air Management Module



v1.0

Intelligent Plenum Air Management Module

# 6 Trouble Shooting (continued)

## **Trouble Shooting:**

The following trouble shooting may assist if the iPAMM is not functioning correctly:

Fans do not function - Swap the fan controller cables plugged into the controller

Terminal Emulator display does not appear - Change the COM port

Terminal Emulator displayed not fully shown - Refresh the screen by pressing 'space' followed by '5'

# **7** Warranty

SRA shall not be liable for any loss or damage direct or indirect or howsoever in relation to the fitness for use, merchantable quality or lack of correspondence with any sample or description or arising from the failure of the customer to satisfy itself that the goods supplied are of the description, quality and character ordered and gives no warranty as to the subsequent use of those goods under those specifications.

SRA warrants all goods from faulty workmanship for a period of 12 months from the date of manufacture.

SRA shall be limited in its liability to the replacement of or supply of equivalent goods.

SRA shall not be liable for any loss or damage (including without limitation consequential loss, damage, injury or installation) resulting from the supply or use of such goods. The warranty does not apply to defects due to normal wear and tear, improper installation by persons other than SRA representatives, or to products or components thereof which are intentionally or negligently damaged or where products or components thereof have been subjected to operating or environmental conditions contrary to any applicable specifications or reasonable intended use.

SRA will be responsible (at SRA's discretion) for the return of defective goods to SRA and delivery of replacement goods only to the extent of the original delivery. This warranty does not extend to any person other than the customer.

conditions contrary to any applicable specifications or reasonable intended use.

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## 8 Warranty

Model	42RU 1050	42RU 1200	45RU 1050	45RU 1200
Cable Entry Frame - Weight (kg)	4.8	5.5	4.8	5.5
Plinth - Weight (kg)	15.0	15.0	15.0	15.0
Cassette - Weight (kg)	16.0	16.0	16.0	16.0
Rack - Height (mm) (including iPAMM)	2141	2141	2274	2274
Rack - Width (mm) (including iPAMM)	600	600	600	600
Rack - Depth (mm) (including iPAMM)	1050	1200	1050	1200
Power Consumption (@max. revolutions per fan) (W)	123	123	123	123
Power Consumption (max. per fan) (W)	160	160	160	160

## **9** Glossary of Terms

iPAMM - Intelligent Plenum Air Management Module

B/M - Bottom Mount

RMS - Remote Monitoring System

SCEC - Security Construction Equiptment Committee

SRA - Server Racks Australia

T/M - Top Mount

10 Notes