

# Vertiv™ Avocent® ADX MP1000 Management Platform GUIDE SPECIFICATIONS

## 1.0 GENERAL

### 1.1 Summary

This specification shall define the electrical and mechanical characteristics and requirements for an enterprise class rack management appliance.

### 1.2 Standards

The Vertiv™ Avocent® ADX MP1000 management platform shall be designed in accordance with the application sections of the current revision of the following documents. Where a conflict arises between these documents and statements made herein, the statements in this specification shall govern.

### 1.3 System Description

#### 1.3.1 Design requirements

##### 1. Redundant power supplies

The management platform shall provide 2 power supplies that are redundant for each other.

##### 2. 2 x 1G Network ports

The management platform shall provide up to 2 network ports which are configurable as:

- Single upstream port
- Two ports in fail over mode
- Two ports bonded for higher upstream bandwidth

##### 3. Local access ports

The management platform shall provide a video port and mouse and keyboard USB ports for local access to the appliance.

##### 4. Serial console port

The Avocent ADX MP1000 management platform shall provide a serial console port for out of band management of the unit.

##### 5. Cooling fans

The Avocent ADX MP1000 management platform shall be redundant cooling fans in the appliance

#### 1.3.2 Performance Requirements

##### 1. AC input

- **Voltage:** The management platform shall incorporate a variable input voltage. Typical operating voltage is 120V, the range is 100VAC-240VAC at 50Hz-60Hz.

## 1.4 Environmental Conditions

### 1.4.1 Ambient temperature

- **Operating:** The ambient temperature range, when management platform is operational, shall be from 50°F to 95°F (10°C to 35°C). There shall not be any degradation in the performance when operating in this range.
- **Storage:** -40°F to 149°F (-40°C to 65°C)

### 1.4.2 Relative humidity

The humidity shall be 10% to 80% with 29°C maximum dew point.

## 1.5 User Documentation

The Avocent ADX MP1000 system shall be supplied with Safety Instruction and Warning Sheet, and printed copy of quick install guide. The user manual shall be downloaded from the web and includes, a functional description of the equipment, safety precautions, illustrations, step-by-step operating procedures and general maintenance guidelines.

## 1.6 Warranty

The Avocent ADX MP1000 manufacturer shall warrant the management platform against defects in materials and workmanship for two years. The no-hassle replacement warranty shall include shipping costs to the customer site for the new replacement unit and shipping costs from the customer site for the return of the failed unit. Optional one-, two-, and four- year uplifted maintenance shall be available from the manufacturer.

## 1.7 Quality Assurance

### 1.7.1 Factory testing

Before shipment, the manufacturer shall fully and completely test the system to ensure compliance with the specification.

## 1.8 Security

### 1.8.1 Secure boot

The system shall provide signed firmware with the manufacturer keys. This signature shall be validated at the time of boot to ensure the firmware is valid.

### 1.8.2 Encryption

The system shall use TLS1.3 with AES-256bit encryption and shall only use encrypted communication between the end user this device or between the manufacturer provide devices.

### 1.8.3 FIPS 140-2 support

The system shall provide FIPS 140-2 cryptographic module support. The system shall allow the FIPS mode to be turned On/Off.

## 2.0 MANAGEMENT FEATURES

### 2.1 Authentication

The system shall provide AD/LDAP as well as local authentication options.

### 2.2 Authorization

The system shall provide a means to restrict user access to devices and what operations they can perform. These permissions shall be enforced in the system.

### 2.3 Discovery

The system shall provide a way to discover any physically connected devices.

### 2.4 Supported Devices

The system shall support Vertiv™ Avocent® IP KVM devices from the manufacturer, virtual machines, service processors which are redfish based, serial access via Vertiv™ Avocent® Advanced Console Servers (ACS) and Vertiv™ Geist™ Rack PDUs from the manufacturer.

### 2.5 Remote Sessions

The system shall provide means to launch remote sessions such as Avocent® IP KVM device or Serial using HTML5 based UIs.

### 2.6 Shared Sessions

The system shall provide the means for multiple users to share sessions on the same device. The session sharing shall allow for passive sessions, Active, Stealth.

### 2.7 Administration

The system shall provide the means to define users, authentication, authorization.

### 2.8 Audit Trail and Logs

The system shall generate events for any user activity and provide access to logs.

### 2.9 System Settings

The system shall provide the ability to configure the system settings such as time, event archival policy, time zone, session timeouts.

### 2.10 Port Settings

The system shall provide the ability to enable/disable PoE on the downstream ports as well as the ability to simply enable or disable the port altogether.

### 2.11 CLI

The system shall provide the ability to use the CLI of the product to perform configuration and for troubleshooting.

### 2.12 RESTful APIs

The system shall provide RESTful APIs to integrate with the product.

### 2.13 Firmware Updates

The system shall provide the means to update the firmware on the managed devices such as service processors or Geist™ rack PDUs or any Avocent® IP KVM device or Serial device provided by the manufacturer.

## **2.14 NAT Configuration**

The system shall provide the means to create NAT rules to access devices behind the Vertiv™ Avocent® ADX RM1048P rack manager directly.

## **2.15 Ecosystem Management**

The system shall provide means to manage the full lifecycle of any manufacturer provide devices which are part of the same family.