# How can I monitor and manage DC power for a rack with two Juniper MX960's?

APPLICATION NOTE -48VDC-001 | Feb 2014

Learn how to use Server Technology's high-density RPM/PDU to gain intelligent monitoring and remote power management of high-power network equipment.



## **Typical Application**

I'm adding two heavily loaded Juniper MX960's to my network room. The high-capacity DC power supplies available on the MX960 are capable of providing 4100W each to the blade system. With a 2+2 redundant configuration, this could be 8200W output; however, the input based on 86% efficiency would be over 9500W. This means I need to provide a total of 237.5A assuming a worse case of -40VDC.

### **Our Solution**

The 48DCWB-10-2X300-E0 Remote Power Manager / Power Distribution Unit provides (5) high-power outputs (up to 125A rated) from each of (2) 300A rated input terminal blocks. The outputs are capable of being turned off or rebooted through remote commands. Additionally, each output is protected by a user specified fuse or circuit breaker and is monitored for current draw through integral GUI, CLI, and SNMP. A second "expansion" unit (48DCXB) is used to provide power to the second router, while access is maintained from the single network connection.

From each input, four of the five outputs will be used in this installation. Each of the outputs in use should be expected to handle at least 60A, thus resulting in the selection of 60A TPC fuses across all outputs (20 total).

## -48VDC Remote Power Manager provides 14kW of clean, uninterrupted power.

## Server Technology's high-density RPM/PDU meets the need of higher power network equipment with added intelligent monitoring.

With the continuing explosion in network traffic, higher and higher densities are being provided for at more and more locations. This high-density network creates high-density power usage conditions. Additionally, as the number of locations rise, the personnel resources to manage this equipment must grow in size or in smarts.







## **Key -48VDC RPM/PDU Benefits:**

- > Normally ON architecture ensures any fault in intelligence or control circuits do not halt power
- > Control of each outlet circuit to provide for remote reboot of attached equipment
- > SNMP management and alert notification
- > Secure access through SSL, SSH, SNMPv3, & LDAPS
- > Integral GUI and CLI communication per system
- > Can be monitored and managed with Sentry Power Manager (SPM) with ease
  - \*Description of the MX960 found in the Juniper product data sheet 1000208-019-EN Oct 2013

Interested in learning more about Server Technology's -48VDC power management solutions? Visit us online at: www.servertech.com/products/-48vdcpowermanagement









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