
24 V Power Supply and Power Distribution.

The external power supply sub-rack consists of two (2) units (eg. Vicor Megapac) each with four (4) independent and isolated 24VDC outputs providing power to each of the two (2) Multi-channel Electronics racks through interconnecting cables, one (1) cable for each MCE sub-rack.

A simplified '24V Power Distribution' block diagram shows the power distribution from the external power supply sub-rack to the MCE racks.

115VAC/15A AC input power, for each unit, is controlled by an AC input main circuit breaker (specified for high inrush current).

Each 24VDC output is rated for 12.6A providing 300W of output power. The output voltage is trimmable (- 0%, + 10%) and controlled by an output circuit breaker allowing for power ON/OFF function for each MCE sub-rack.

Inter-connection between the power supply sub-rack and the MCE sub-rack is made using a 3 conductor 14 gauge cable with 4 pin MS circular connectors.

Computer control (power supply ON/OFF) is an option which is currently not under consideration.

A simplified '24V Power Supply' block diagram shows a 4 output, 24VDC power supply unit.