Power Distribution Subsystem

The power distribution subsystem consists of the hardware listed in the following table to distribute 24 Vdc from a Series C power system to one or more CCAs in one or both sides of a cabinet containing the power system.

Description	Model or Part Number
Power Distribution Subsystem (includes the following parts)	51199406-100
Spare/Loose Parts	
DC Power Cable (connects one of the six 24 Vdc power distribution connectors in the 8-connector interface on the subsystem to the Horizontal DC Power Bus Bar (HDPB)), 9-inches (229 mm) long	51202324-100
Horizontal DC Power Bus Bar (HDPB) (includes mounting hardware)	51403896-100
Pair of Red and Black Conductors (Wires) (provide +24 Vdc and 24 Vdc common from the HDPB to one CCA in a cabinet side. Additional pairs are needed to connect to additional CCAs in the same or opposite cabinet side.)	51202335-300

Horizontal dc power bus bar (HDPB)

The HDPB provides dc power to the tops of up to three (vertical) CCAs (mounted on IOTA Channels) at the top of the cabinet in one cabinet side. the +24 Vdc and 24 Vdc common are provided to IOTAs and their IOMs through two buses (conductors) in each CCA. Each CCA also contains a third bus that serves as a connection point for field wiring shield wires.

If a Series C Power System and HDPB must also power additional CCAs in the other cabinet side of a dual-access cabinet, additional red/black wire pairs (51202335-300) must be added for each vertically-adjacent pair of CCAs in the other cabinet side. The HDPB has three additional terminals for connection of a total of six pairs of red and black wires, so it can support CCAs in both the front and rear sides of a dual-access cabinet, as long as the Power System can provide enough current for both cabinet sides. Otherwise, another Power System and another Power Distribution Subsystem must be used to power the CCAs in the other cabinet side.

C300 Controller Memory Backup

The controller memory backup assembly consists of the following parts and provides up to 50 hours of memory backup to one or two connected C300 Controllers.

Description	Model or Part Number
C300 Memory Backup Assembly (MBA) - For 1 to 2 C300s	CC-SCMB01
C300 Memory Backup Assembly (MBA) - For 2 or more C300s	CC-SCMB02
Spare/Loose Parts	
RAM Charger Assembly	51199932-100
RAM Charger Mounting Assembly (3 inches, 76 mm)	51202340-100
Cable, MBA to one C300 Controller, 30 inches (0.7 m) long	51202330-100
Power cable, MBA to Power System, 55 inches (1.4 m)long	51202331-100
Cable, MBA to one C300 Controller, 84 inches (2 m) long	51202330-200

Memory backup assembly cabling guidelines

- You can use the 30-inch (0.7 meter) long cable to connect the MBA to C300, when the RAM charger mounting assembly is mounted adjacent to its associated C300 IOTA on the same CCA. Use the 84-inch (2 m) long cable when the RAM charger mounting assembly is **not** adjacent to its associated C300 IOTA on the same CCA.
- You can connect up to two C300s to the RAM charger mounting assembly using either the 30-inch (0.7 m) or 84-inch (2 m) long cables, as required.
- The 55-inch (1.4 m) long power cable restricts the mounting location of the MBA to the upper CCA on the left side of a cabinet side adjacent to the Series C power system.

Memory backup hold-up times

The following table lists the hold-up time for a fully charged RAM battery charger depending on the number of C300 Controllers that are connected.

Number of C300s	Hold-Up Time in Hours	Hold-Up Time in Days
1	110	4.58

Number of C300s	Hold-Up Time in Hours	Hold-Up Time in Days
2	55	2.23
3	36.6	1.52
4	27.5	1.14

Series C DC Power Connections

The following figure illustrates the typical dc power and battery backup connections made in Series C cabinets. For more information about the components shown in the figure, refer to the previous power system and memory backup sections.

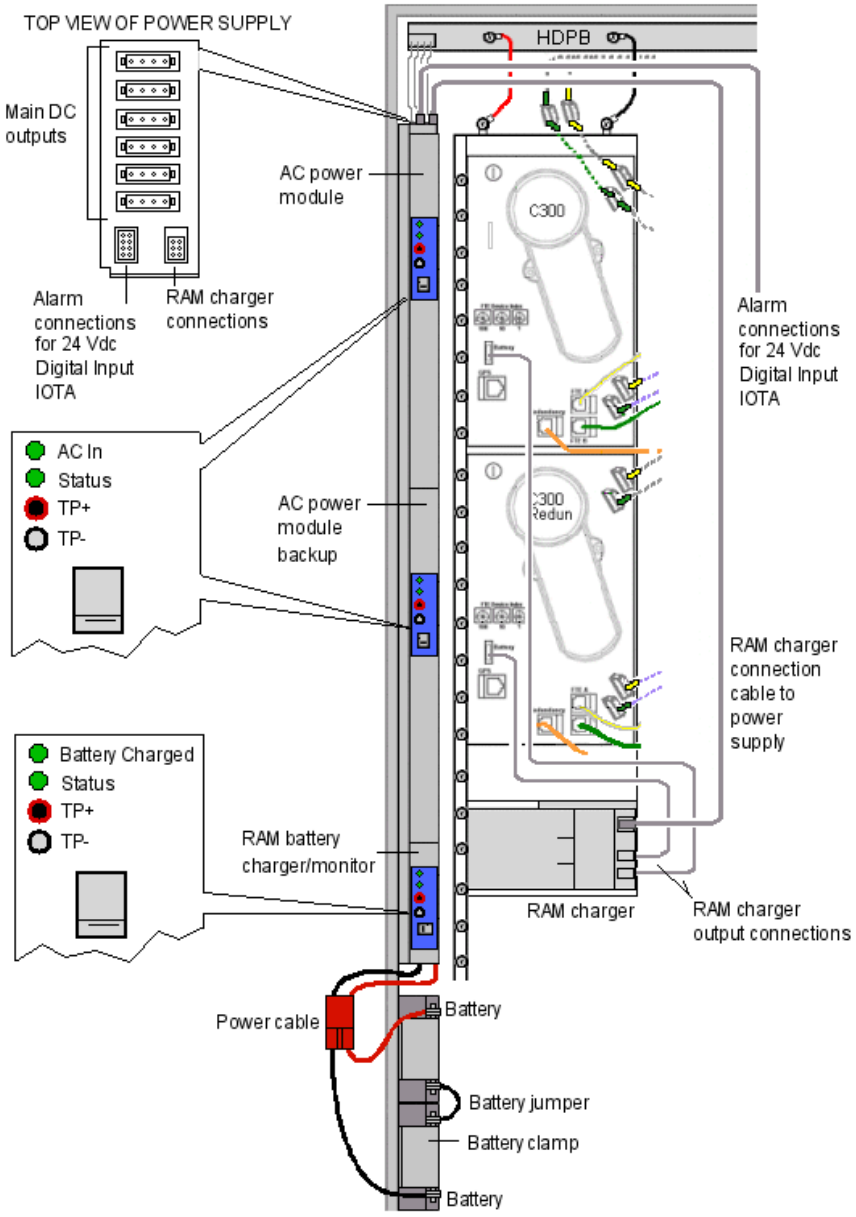

Figure 50 Typical dc power and battery backup connections in Series C cabinet

Series C Power System Indicators

The following table summarizes the Light Emitting Diode (LED) indications provided by the various Series C power system components.

LED Name -Color	LED State		
	OFF	***ON***	***Blinking***
AC Power Module Indicators (per supply)			
AC IN - Green	AC input is lost	AC input is within specified range	N/A
Status - Green	• DC output voltage is out of specifications, • A greater current than specified is being pulled from the power supply, and/or • Power supply has reached temperatures above specified limits.	Power supply output is within specified voltage, temperature, and current limits.	Fan has failed. (This indicator must also be off even if a failed fan in one supply is being *windmilled* by the airflow from the fan in an adjacent supply.)
Main Battery Backup Charger/Regulator/Monitor Indicators			
Status - Green	• DC input is lost, • Battery charger senses an over-voltage on the batteries, • Battery charger senses over-current while charging batteries, • Battery charger senses an over-temperature condition, • Batteries are not	Power supply output is within the specified voltage, temperature, and current limits.	Fan has failed. (This indicator must also be off even if a failed fan in one supply is being *windmilled* by the airflow from the fan in an adjacent supply.)