

C&D TECHNOLOGIES

Power Solutions

AGM 25

-48 VDC POWER PLANT, 1350W — 22.5ADC

C&D TECHNOLOGIES' NEW AGM 25 power plant offers compact, reliable power for -48VDC telecommunications applications. The AGM 25 is ideal for customer premises, fiber optics, outside plant, and other applications requiring smaller increments of -48VDC power. Incorporating hot swappable, high frequency -48V, 7.5A rectifiers,

the AGM 25 delivers 22.5A of total DC current in a compact 2U high, 23" rack space. Available in bulk power and complete integrated system configurations, the AGM 25 offers an impressive combination of features and capabilities at the lowest possible cost to the customer.



AGM 25

STANDARD PLANT FEATURES:

• Space-saving design fits in 2Us of Rack Space
• Microprocessor monitoring and control (List 3 and 4) Accepts up to (3) -48V, 7.5A rectifiers
• Features advanced technology hot swappable, high frequency switch mode rectifier cards
• Provides 15 Amps of redundant load capability
• Designed for 23" rack mounting
• Includes terminations for two battery strings
• Delivers full plant capacity at -60VDC
• Forced air cooling
• Requires only 12" total plant depth
• Exceeds ANSI/C62.41 1980 input surge requirements
• UL listed to UL1950 — pending
• Exceeds IEC 555 input current harmonic specification
• Optional AC power cords available

ALARM RELAY CONTACTS (FORM C)

■ Fuse Fail (List 2, 3, and 4)
■ RFA (List 2, 3, and 4)
■ Major (List 3 and 4)
■ Minor (List 3 and 4)

TEST JACKS (LIST 2, 3, AND 4)

■ Battery Volts
■ Battery Current
■ Load Current

AGM 25 CONFIGURATIONS:

LIST 1	BULK POWER ONLY	Includes terminal block for load connections, RFA alarm output, control inputs for HVSD, RS and remote equalize.
LIST 2	BASIC POWER PLANT	Includes 8 GMT fuse positions, load and battery shunts, test jacks for plant voltage and current, Major, Minor, FA and RFA alarm indicators with FA and RFA alarm outputs.
LIST 3	FULL FEATURE POWER PLANT	Microprocessor controller, automatic load disconnect/reconnect, adjustable HVSD/restart operation, automatic equalize mode, battery temperature compensation, remote float voltage control, HV, LV, LVD disconnect and high temperature alarm indications, adds Major/Minor alarm outputs. Two battery and one ambient temperature sensors.
LIST 4	FULL FEATURE POWER PLANT	Full Feature Power Plant with load disconnect changes to battery disconnect.

C&D Liberty 1000 Batteries: To complete your DC Power System we are proud to offer the premier valve-regulated battery on the market today. Where size, maximum reserve and high reliability are concerns, the Liberty 1000 from C&D is the best choice.

- The microprocessor controller (List 3 and List 4), provides dip switches for single point 0.5 volt increment settings of the rectifier float setting. The microprocessor controller also provides dip switches for 0.5 volt increment setting of the HVSD and LVD settings. In addition to these features, the microprocessor controller offers the following features:
 - Automatic load disconnect/reconnect
 - Adjustable HVSD/Restart operation
 - Automatic Equalize
 - Battery Temperature compensation
 - Two battery and one ambient temperature sensors
- **Advanced Technology Rectifiers:** C&D TECHNOLOGIES' advanced 48 volt, 7.5 ampere modular rectifiers feature high efficiency, near unit power factor and compact size. The hot-swappable modules can be easily installed without tools and without system interruption.
- **Front Accessibility:** All distribution and battery connections are accessible from the front, rear or right side, making this plant ideal for confined locations. The AGM-25 can be placed virtually anywhere while still maintaining easy access to vital plant connections. AC access is from the top, rear or bottom and an optional 10 ft. long AC line pigtail is available.
- **Distribution Features:** The AGM-25 supplies up to 8 individual loads via GMT style fuses at up to 10 Amps per load. Redundant operation with a maximum load of 15 Amps.
- Plant voltage, battery shunt and load shunt test jacks are provided for direct monitoring.
- **Fail Safe Design:** The AGM-25 is incapable of damaging the telephone equipment it is powering. Any single failure mode cannot result in a high voltage scenario on the output DC bus rails. Failure of the alarming system will not result in a failure to transmit a major alarm.
- **Optional Low Voltage Disconnect (load or battery circuit, List 3 or List 4):** The optional Low Voltage Disconnect protects batteries from damage due to over discharge. The LVD operation can be disabled by a dip switch setting which will override the "on" state for servicing.
- **Optional Temperature Compensation and High Temperature Alarm (List 3 and List 4):** High temperature is the enemy of battery life. These options allow automatic monitor and control of rectifier output voltage to compensate for variations in ambient temperature.

HFM48AC 7.5 (48VDC, 7.5A) RECTIFIER SPECIFICATIONS:

AC Voltage Range	106 to 264VAC
AC Input Current	120VAC: 4.6A - 208VAC: 2.55A - 240VAC: 2.12A
AC Frequency Range	45 to 65 Hz
Input Power Factor	0.99
AC to DC Efficiency	85%
Heat Dissipation	244 Btu/Hr
Input/Output Protection	Fused/Diode
Voice Frequency Noise	<32dBmC
Operating Temperature Range	-40 to 65°C
Float Voltage Range	-48 to -58VDC
Equalize Voltage Range	-48 to -60VDC
Parallel Operation	±10% load share
Voltage Regulation	±0.5% over full range input/output

FRONT PANEL INDICATORS (LEDs)

RECTIFIER INDICATORS (LIST 1, 2, 3, AND 4):
■ Normal (Green)
■ Equalize (Yellow)
■ Remote Control Active (Yellow)
■ Rectifier Fail (Red)
SYSTEM INDICATORS:
■ Major (List 3 and 4)
■ Minor (List 3 and 4)
■ HV (List 3 and 4)
■ LV (List 3 and 4)
■ LVD (List 3 and 4)
■ FA (List 2, 3, and 4)
■ RFA (List 2, 3, and 4)

OPERATING ENVIRONMENT:

OPERATING TEMPERATURE RANGE -40 to +85°
HUMIDITY 0 to 95 percent non-condensing
ALTITUDE 0 to 2,000 feet (0 to 2133m)
HEIGHT 3.5" (2 rack spaces)
MODULE RECTIFIER WEIGHT 3 lbs. Unloaded
SHELF WEIGHT (WITHOUT RECTIFIER) <16 lbs.
DEPTH 12"
WIDTH 23" rack mounting



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