

COMMANDER III

The Commander III DC Power System is the next generation of reliable, efficient, and scalable power solutions designed to meet the demands of mission-critical operations. With advanced features, unmatched flexibility, and industry-leading efficiency, this system is built to adapt as your needs evolve.

The Commander III isn't just a power system—it's a platform for growth, designed to scale with your needs. Its combination of efficiency, adaptability, and cutting-edge features makes it the ultimate solution for modern power demands.

Contact us today to see how the Commander III can power your mission-critical systems



KEY FEATURES

- 90–250 VAC input, power factor corrected
- 8 power bays accept 3000 Watt modular rectifiers
- 480 Amp, 24000 Watt total max. output capacity, (420 Amp, 21000 Watt, N+1) @ -48 VDC
- Output temperature compensated for precise battery charging
- 18x DC circuit breaker distribution capacity with tripped breaker alarm
- 4x 125A battery disconnect breakers with tripped breaker alarm
- EM4x Controller with comprehensive controls
- (local and web UI), data collection, and alarm monitoring/ logging SNMP version v2 and v3
- Hot swappable power bays
- General purpose digital inputs & relays for user configured external alarms
- Built in 500A low voltage disconnect (LVD)
- Easily configures to meet site power requirements
- Modular architecture enables additional rectification, DC-DC conversion and solar rectification

ELECTRICAL SHELF SPECIFICATIONS

Commander III	
AC Input Voltage	90-300 VAC derates below 190VAC
Frequency Rate	45-65 Hz
Output Voltage	-54.4 VDC adjustable -48-58 VDC
Output Power	3000W per RM3048HE Rectifier
Output Current	60 Amps per RM3048HE rectifier
Efficiency	>94% (from 30-95% output power)
Power Factor	>0.99
Dimensions:	Height 8.75 in (222.25mm) (5U) Width 19 in (483mm) Depth 16.1 in (410mm)
Weight (without rectifiers)	39.20 lbs (17.8 kgs)
Weight (with max rectifiers)	65.60 lbs (28.4 kgs)
Ambient Temperature (nominal)	25.5°C, 5-95% RH (non-condensing)
Range	-20-70°C (derate above 45°C)
Altitude	<8202ft, derate maximum ambient temperature by 4°C per 3280ft above sea level



COMMANDER III DC POWER SYSTEM

COMPACT & SCALABLE POWER WITH SUPERIOR CONTROL

Commander III is a Compact Power System that packs a powerful punch with up to 24kW of power. This innovative power system is a robust, compact solution with superior control and continuous active monitoring. When rack space is a critical component, the Commander III provides a highly efficient, -48VDC rectifier solution.

Its combination of efficiency, adaptability, and cutting-edge remote-control monitoring make it the ultimate solution for modern power demands. Whether it's deployed on a mountain top, skyscraper or off the grid, Commander III's remote monitoring takes the guess work out of troubleshooting.

The Commander III DC Power System is the next generation of reliable, efficient, and scalable power solutions designed to meet the demands of mission and operational-critical systems. With its advanced features, unmatched scalability, and industry-leading efficiency, this system is built to adapt as your needs evolve.

Contact us to see how the Commander III can help you power up.

RECTIFIER EXPANSION SHELF

1U Rectifier Expansion Shelf, CMDR3RECXS, allows up to 4x RM3048HE 48V rectifiers to be added to the system for up to an additional 12kW/240A of capacity.



RM3048HE

KEY FEATURES

ADD CAPABILITY/CAPACITY TO THE COMMANDER III



- High Efficiency
- Hot Swappable
- Forced Air Cooled
- Thermally Protected
- Power Factor Corrected
- Wide Input AC Voltage
- Constant Power Output Limit
- Input/Output Voltage and Current Protected
- Active Load Sharing
- Serial alarm and control interface
- Microprocessor controlled
- Nominal DC Output: 48V
- Maximum Current Rating: 60A
- Maximum Rated Power: 3.0kW

DC-DC CONVERTER EXPANSION SHELF

1U DC-DC Converter Expansion Shelf, CMDR3DCXS, allows up to 4x 12V or 24V DC-DC Converters to be added to the system enabling dual voltage output.



CM12-40 OR CM24-40

KEY FEATURES

ADD CAPABILITY/CAPACITY TO THE COMMANDER III



- High Efficiency
- Hot Swappable
- Forced Air Cooled
- Thermally Protected
- Power Factor Corrected
- Wide Input AC Voltage
- Constant Power Output Limit
- Input/Output Voltage and Current Protected
- Active Load Sharing
- Serial alarm and control interface
- Microprocessor controlled
- Nominal DC Output: 12V (CM 12-40) or 24V (CM 24-40)
- Maximum Current Rating: 40A
- Maximum Rated Power: 600W

SOLAR EXPANSION SHELF

1U Solar Rectifier Expansion Shelf, CMDR3SOLXS, allows up to 2x RM3048HE and switches to be added to the system enabling the connection of solar panels to the unit.



SM2048HE

Requires at minimum 1x
SOLSWITCH & 1 RM3048HE

KEY FEATURES

ADD CAPABILITY/CAPACITY TO THE COMMANDER III



- High Efficiency
- Hot Swappable
- Forced Air Cooled
- Thermally Protected
- Power Factor Corrected
- Wide Input DC Voltage 85-400VDC
- Start-up Voltage: 120VDC
- MPPT Efficiency: 97.5%
- Constant Power Output Limit
- Input/Output Voltage and Current Protected
- Active Load Sharing
- Serial alarm and control interface
- Microprocessor controlled
- Nominal DC Output: 48V
- Maximum Current Rating: 41.7A
- Maximum Rated Power: 2.0kW