

# CM SERIES 600W DC-DC CONVERTERS



| DC INPUT               |                          | CM648-24   | CM624-48  | CM612-48  | CM612-24  |
|------------------------|--------------------------|--|-----------|-----------|-----------|
| Nominal Input Voltage: |                          | 24V DC   | 48V DC    | 48V DC    | 24V DC    |
| Input Voltage Range:   |                          | 20-30V DC  | 40-60V DC | 40-60V DC | 20-30V DC |
| Protection:            | Fuses:<br>Input Voltage: | Fuse in the positive input with crowbar diode<br>Auto shutdown, auto restart when correct voltage restored |           |           |           |

| DC OUTPUT               |  | CM648-24   | CM624-48  | CM612-48  | CM612-24  |
|-------------------------|--|--|-----------|-----------|-----------|
| Nominal Output Voltage: |  | 48V DC   | 24V DC    | 12V DC    | 12V DC    |
| Output Voltage Range:   |  | 46-52V DC  | 22-26V DC | 11-14V DC | 11-14V DC |
| Maximum Output Current: |  | 13.5A  | 25.0A     | 40.0A     | 40.0A     |
| Maximum Output Power:   |  | 650W   | 650W      | 560W      | 560W      |
| Peak Efficiency:        |  | 92.0%  | 93.0%     | 90.0%     | 90.0%     |
| Regulation:             | Line:<br>Load:   | ±0.1%<br>±0.5% (no load to full load)  |           |           |           |
| Start-up Time:          | Walk-in Delay:   | 2-8 seconds depending on load and output voltage   |           |           |           |
| Protection:             | Current Limit:<br>Over Temperature:<br>Polarity Reversal:<br>Over Voltage: | Adjustable to 50-100% of maximum rated current<br>Auto current turndown, backup shutdown<br>Output fuse in positive with crowbar diode<br>Adjustable limit |           |           |           |
| Noise:                  | Ripple <100Hz:<br>Peak to Peak 0-20MHz:                                    | <1mV rms unweighted<br><50mV peak to peak  |           |           |           |
| Isolation:              | Input to Output:<br>Input to Chassis:<br>Output to Chassis:                | 4230V DC<br>2115V DC (VDR to chassis removed)<br>2115V DC  |           |           |           |

## ENVIRONMENTAL REQUIREMENTS

|                      |   |
|----------------------|---|
| Ambient Temperature: | -20°C to +70°C<br>(maximum output power is derated above +50°C) |
| Storage Temperature: | -30°C to +85°C  |
| Humidity:            | 5-95% RH (non condensing)                                       |
| Altitude:            | <2,500m at full power   |



## MECHANICAL

|                              |  |
|------------------------------|--|
| Dimensions W, H, D:          | 111.5mm, 44.45mm (1U), 282.0mm overall<br>(260.0mm rack depth) |
| Weight:                      | 1.1kg  |
| Shipping Dimensions W, H, D: | 170.0mm, 52.0mm, 325.0mm                                       |
| Shipping Weight:             | 1.6kg  |
| Cooling:                     | Force cooled (front to back airflow)                           |

## COMPLIANCES

|            |                     |
|------------|---------------------|
| Safety:    | EN60950             |
| Immunity:  | CISPR24             |
| Emissions: | CISPR22             |
| Other:     | CE & RoHS compliant |



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