

# DC/DC Converters

There are Multiple Applications for DC/DC Converters:

- Stabilized Control Voltages in Battery Powered Applications
- Provides Galvanic Isolation
- Mobile Applications
- To Avoid Ground Loops
- To Restore Control Voltage at the End of Long Cable Runs Due to Voltage Drop



|                                         | COMING       |                |                        |                |                |                                               |                |                |                |                                   | COMING         |                |
|-----------------------------------------|--------------|----------------|------------------------|----------------|----------------|-----------------------------------------------|----------------|----------------|----------------|-----------------------------------|----------------|----------------|
| Output Voltage                          | 5V           | 12V            | 24V                    | 24V            |                |                                               |                |                |                |                                   | 48V            |                |
| Output Current                          | 8A           | 8A             | 3.8A                   | 4A             | 5A             | 5A                                            | 5A             | 10A            | 20A            | 20A                               | 5A             | 10A            |
| Input Voltage Range                     | 18-36V       | 18-32.4V       | 14.4-32.4V             | 10.8-16.2V     | 18-32.4V       | 18-32.4V                                      | 36-60V         | 18-35V         | 88-360V        | 480-840V                          | 36-60V         | 88-360V        |
| Output Voltage Range                    | 4.5-5.5V     | 12-15V         | 24V                    | 23-28V         | 23-28V         | 23-28V                                        | 23-28V         | 23-28V         | 24-28V         | 24-28V                            | 48-56V         | 48-56V         |
| Output Current                          | 8A           | 8-6.4A         | 3.8A                   | 4-3.4A         | 5-4.3A         | 5-4.3A                                        | 5-4.3A         | 10-8.6A        | 20-17.1A       | 20-17.5A                          | 5-4.3A         | 10-8.6A        |
| Output Power                            | 40W          | 96W            | 92W                    | 96W            | 120W           | 120W                                          | 120W           | 240W           | 480W           | 480W                              | 240W           | 480W           |
| Power Reserves                          | -            | 20%            | -                      | 20%            | 20%            | 20%                                           | 20%            | 20%            | 20%            | 25%                               | 20%            | 20%            |
| Ripple & Noise max. [mV <sub>pp</sub> ] | 50mV         | 75mV           | 50mV                   | 50mV           | 50mV           | 50mV                                          | 50mV           | 50mV           | 50mV           | 100mV                             | 100mV          | 50mV           |
| Efficiency (Typical)                    | 82.0%        | 88.2%          | 90.5%                  | 87.7%          | 90.3%          | 90.2%                                         | 90.3%          | 94.2%          | 94.6%          | 95.0%                             | 94%            | 94.6%          |
| Power Losses (Typical)                  | 8.5W         | 12.8W          | 9.7W                   | 13.5W          | 12.9W          | 13.3W                                         | 12.9W          | 14.8W          | 27.4W          | 25.5W                             | 15.3W          | 27.4W          |
| Operating Temperature Range             | 0°C to +70°C | -25°C to +70°C | -25°C to +70°C         | -25°C to +70°C | -25°C to +70°C | -25°C to +70°C                                | -25°C to +70°C | -25°C to +70°C | -25°C to +70°C | -25°C to +70°C                    | -25°C to +70°C | -25°C to +70°C |
| Connection Terminals                    | Screw        | Screw          | Spring Clamp           | Screw          | Screw          | Spring Clamp                                  | Screw          | Screw          | Screw          | Spring Clamp                      | Screw          | Screw          |
| Dimensions (WxHxD)                      | 49x124x102mm | 32x124x102mm   | 32x124x102mm           | 32x124x102mm   | 32x124x102mm   | 32x124x102mm                                  | 32x124x102mm   | 42x124x117mm   | 65x124x127mm   | 65x124x127mm                      | 42x124x117mm   | 65x124x127mm   |
| Weight                                  | 470g         | 425g           | 425g                   | 435g           | 425g           | 450g                                          | 425g           | 500g           | 940g           | 890g                              | 500g           | 940g           |
| Special Features                        |              | Soft Start     | NEC Class 2 Soft Start | Soft Start     | Soft Start     | DC-OK and Input Low Relay Contacts Soft Start | Soft Start     |                | DC-OK Contact  | DC-OK Contact Intermediate DC Bus |                | DC-OK Contact  |
| List Price (USD)                        | \$340.00     | \$360.00       | \$390.00               | \$350.00       | \$320.00       | \$370.00                                      | \$350.00       | \$420.00       | \$525.00       | \$570.00                          | \$450.00       | \$580.00       |
| Product Family                          | SilverLine   | DIMENSION      | DIMENSION              | DIMENSION      | DIMENSION      | DIMENSION                                     | DIMENSION      | DIMENSION      | DIMENSION      | DIMENSION                         | DIMENSION      | DIMENSION      |
| Catalog Number                          | SLD2.100     | CD5.121        | CD5.241-L1             | CD5.243        | CD5.241        | CD5.241-S1                                    | CD5.242        | CD10.241       | CPS20.241-D1   | QTD20.241                         | CD10.482       | CPS20.481-D1   |