

750W Series 110-220V Input
500W Series 48-72VDC Input
All output voltages 0-125VDC
Adjustable current limit 0 - I_{max}
OPUS DC/DC Power Systems
Stand-Alone applications



DC/DC Converters to OPUS Power Systems



Modular Converter Systems



Product Description

The OPUS EDC Converters are parallel connectable, fault tolerant and n+1 redundant modules. Modular Converter system is ideal solution to provide several secured DC voltages from one main battery system.

EDC converters are compatible to OPUS DC power systems or they can be used separately in any applications. Relay alarm of converter can be reported via VIDI controller alarm management and monitored remotely.

Typical Applications

- Utility Communication systems (e.g. 110V/48V)
- Tele site Auxiliary systems (e.g. 48V/12-24V)
- Voltage regulation for sensitive loads (e.g. 1.8 vpc-2.4 vpc / 2 vpc)
- Galvanic Isolation between different grounding systems (e.g. -48V / floating 48V)

750W DC/DC Converters for 110-220VDC Battery Systems

| Type | Description | Input voltage range (See AC range next page) | Nominal output voltage | Voltage / Current limit setting range | Max Output Current @ Nominal Output, See Power Curve | |
|--------------|---------------------|---|------------------------|---------------------------------------|--|---------------|
| | | | | | 110VDC Input | 220VDC Input |
| 7080X0014618 | EDC 110-220/12-750 | 65-300VDC | 12VDC | 0-36VDC / 0-30A | 12VDC / 30A | 12VDC / 30A |
| 7080X0014619 | EDC 110-220/24-750 | 65-300VDC | 24VDC | 0-36VDC / 0-30A | 24VDC / 30A | 24VDC / 30A |
| 7080X0014620 | EDC 110-220/36-750 | 65-300VDC | 36VDC | 0-54VDC / 0-20A | 36VDC / 20A | 36VDC / 20A |
| 7080X0014621 | EDC 110-220/48-750 | 65-300VDC | 48VDC | 0-72VDC / 0-15A | 48VDC / 15A | 48VDC / 15A |
| 7080X0014622 | EDC 110-220/60-750 | 65-300VDC | 60VDC | 0-108VDC / 0-10A | 60VDC / 10 A | 60VDC / 10 A |
| 7080X0014623 | EDC 110-220/110-750 | 65-300VDC | 110VDC | 0-144VDC / 0-7.5A | 110VDC / 6.5A | 110VDC / 6.5A |

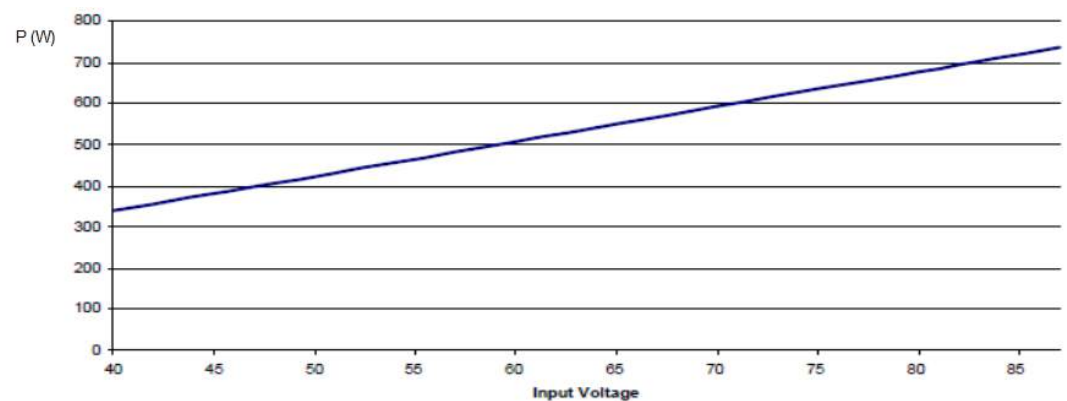
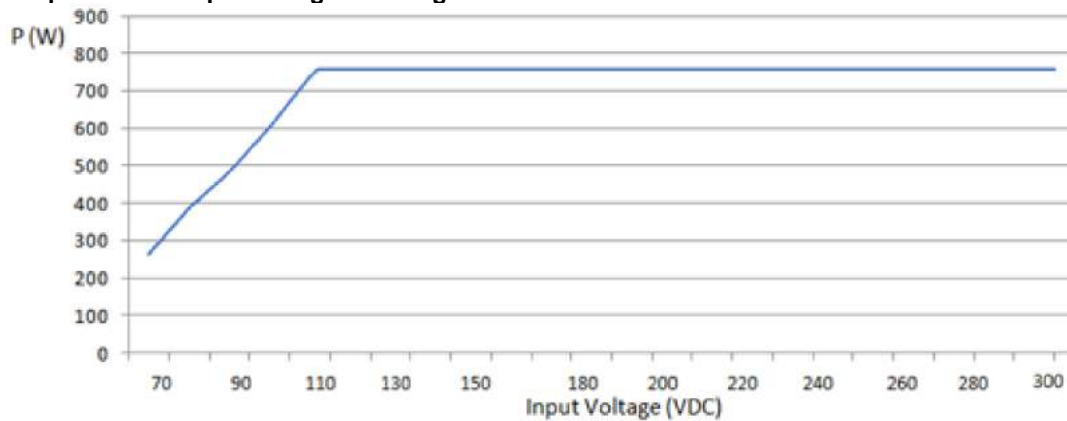
400W-500W DC/DC Converters for 48-72VDC Battery Systems

| Type | Description | Input voltage range | Nominal output voltage | Voltage Setting range | Max Output Current @ Nominal Output, See Power Curve | |
|--------------|-------------------|---------------------|------------------------|-----------------------|--|--------------------|
| | | | | | 48VDC Input (400W) | 60VDC Input (500W) |
| 7080X0014624 | EDC 48-72/12-500 | 40-87VDC | 12VDC | 0-32VDC / 0-30A | 12VDC / 30A | 12VDC / 30A |
| 7080X0014625 | EDC 48-72/24-500 | 40-87VDC | 24VDC | 0-32VDC / 0-30A | 24VDC / 16A | 24VDC / 20A |
| 7080X0014626 | EDC 48-72/36-500 | 40-87VDC | 36VDC | 0-45VDC / 0-20A | 36VDC / 11A | 36VDC / 13A |
| 7080X0014627 | EDC 48-72/48-500 | 40-87VDC | 48VDC | 0-64VDC / 0-15A | 48VDC / 8A | 48VDC / 10A |
| 7080X0014628 | EDC 48-72/60-500 | 40-87VDC | 60VDC | 0-92VDC / 0-10A | 60VDC / 6.5 A | 60VDC / 8 A |
| 7080X0014629 | EDC 48-72/110-500 | 40-87VDC | 110VDC | 0-129VDC / 0-7.5A | 110VDC / 3.5A | 110VDC / 4.5A |

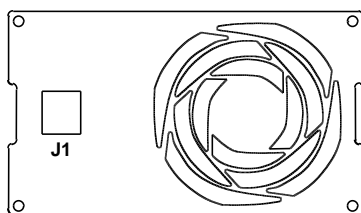
Technical Specifications

| | EDC 500W series | EDC 750W series |
|-------------------------|---|--|
| Nominal input | 48-72 VDC | 110-220 VDC |
| Input range | 40-87 VDC, see de-rating curve | 65-300VDC / 55-250VAC, see de-rating curve |
| Max Input Current | 11 A | 9 A |
| Input fuse, internal | 12 A | 10 A |
| Polarity protection | Input and output protected against wrong polarity connection | |
| Line / Load regulation | ±0.1% / ±0.5% | |
| Output setting accuracy | ±0.1% | |
| Output ripple (f>50Hz) | <50 mVrms | |
| Efficiency | Typical 84% @ Nominal input, 10%-100% load | |
| Status LED indicator | Power OK: Orange LED | |
| Remote Alarms | Module Failure, Potential free relay alarm | |
| Isolations | input-chassis 1500 VAC, input-output 3750 VAC, output-chassis 500 VAC | |
| Standards | Safety: IEC 60950-1:2005 (2nd Edition) + A1:2009 + A2:2013 EMC:EN 61000-6-2:2005, EN 61000-6-3:2007 + A1(2011), EN 61000-3-2:2014, EN 61000-3-3:2013 | |
| Protection class | IP20 metal enclosure | |
| Connections | Input: 1m cable with open ends - negative DC supply input (black wire) + positive DC supply input (white wire) PE protective earth (green wire) Output: Terminal blocks (+ -), 6mm ² 2m wires Alarm Relay: RJ11 terminal, NO-NC-COM, 1m wires | Input: 1m cable, mains plug L positive DC supply input (brown wire) N negative DC supply input (blue wire) PE protective earth (green-yellow wire) Output: Terminal blocks (+ -), 6mm ² 2m wires Alarm Relay: RJ11 terminal, NO-NC-COM, 1m wires |
| Dimensions & Weight | 220 x 112 x 73 mm / 1,55kg | |
| Mounting | OPUS DC Systems, DIN-rail, wall, bench | |
| Cooling | Temperature controlled fan | |
| Operating temp range | -25°C...+40°C | |

Output Power - Input Voltage de-rating curves



Connectors



J1 Option Analog Input

