

# DC/DC 19" EURO SIZE

## 500W Converter Family for Telecommunications



Typical Telecom DC/DC conversions  
 Input / output galvanically isolated  
 Efficiency > 84 %  
 Parallel connectable  
 Module fail / Low voltage alarms  
 Battery charging applications, 48V models  
 EMC EN55022 B, Safety EN60950  
 CE-marking, Telecom standards

Powernet's DC/DC converter family is made for telecom applications to convert the 24/48/60V battery voltage to the needed 24, 48 or 60VDC. Units are made to meet CE marking according to EN 60950 safety and EN 55022B EMC. The parallel connection of the converters increases the power up to several kW. This all is in compact 19" subrack configuration easy to install and access through standard H15 plug-in connector. The modules do not include fans and they have high MTBF.

Type	Input Voltage	Output Voltage	Output Adjustment	Output Current	Output Power	Dimensions (Width x Height x Depth)	Weight
DDC1870	18.5...38 VDC	48 VDC	47-54 VDC	8.5 A	410 W	20TE x 6U x 160mm	3 kg
DDC7680	18.5...38 VDC	60 VDC	54-62 VDC	6 A	400 W	20TE x 6U x 160mm	3 kg
DDC1810	38...74 VDC	24 VDC	21-26.5 VDC	22.5 A	540 W	20TE x 6U x 160mm	3 kg
DDC4500	38...74 VDC	48 VDC	46-51 VDC	9.5 A	460 W	20TE x 6U x 160mm	3 kg
DDC4220	38...74 VDC	60 VDC	52-68 VDC	8.5 A	510 W	20TE x 6U x 160mm	3 kg

### 19" SUB-RACKS, DISTRIBUTION AND WALL MOUNTING ADAPTERS

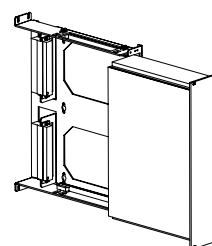


Type: MSR7330  
 Rack for DDC1870  
 And DDC7680

Type: MSR4860  
 Rack for DDC1810

Type: MSR4870  
 Rack for DDC4500  
 and DDC4220

Type: DDU7890  
 Output MCB  
 distribution unit for  
 all 6U sub-racks



Type: WMA4550  
 Wall mounting adapter



Type: 55091500  
 H15 mating connector

#### 1500W DC/DC SYSTEMS

Redundant (n+1) DC/DC converter systems are easy to build up 19" sub-rack for the modules. 3 pcs of 500W DC/DC converters the rack. Input fuses and alarms are included in the rack. Output done by separate DDU7890 module (inside the rack), which provides outputs. Also customised sub-racks and distributions can be made.

#### STAND-ALONE APPLICATIONS

In stand-alone applications 500W DC/DC units can be easily mounted to wall by using wall mounting adapter. The small and light weight adapter provides the same plug-in features as 19" sub-rack.



# POWERNET



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## SPECIFICATIONS

Efficiency	> 84 %
Safety	EN 60950 Class 1
EMC	Designed to meet EN 55022 B
Approvals	CE-marking
Ripple voltage	typically < 20mV <sub>rms</sub>
Load regulation	typically ± 1%
Line regulation	typically ± 0.1%
Current limit	typically < 120 %
Short circuit current	typically < 150 %
Enclosure	IP 20
Operation temperature	-25°C...+55 °C
Humidity	5...85% RH IEC68-2-30
Cooling	Convection

**ASK FOR FULL SPECIFICATIONS**

## GROUND CONNECTIONS

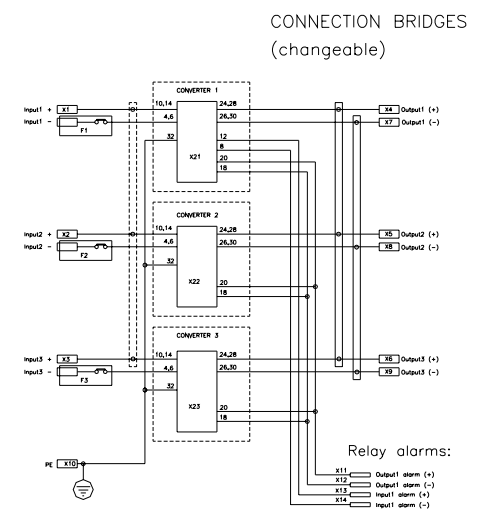
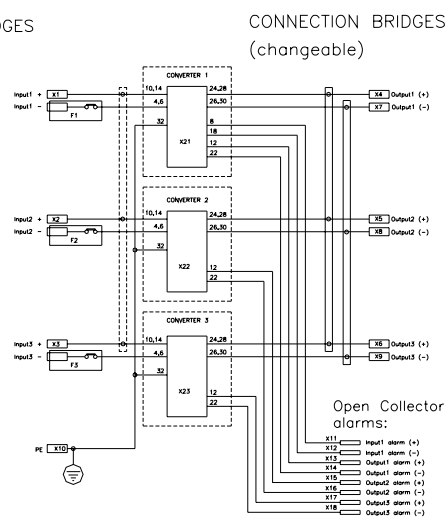
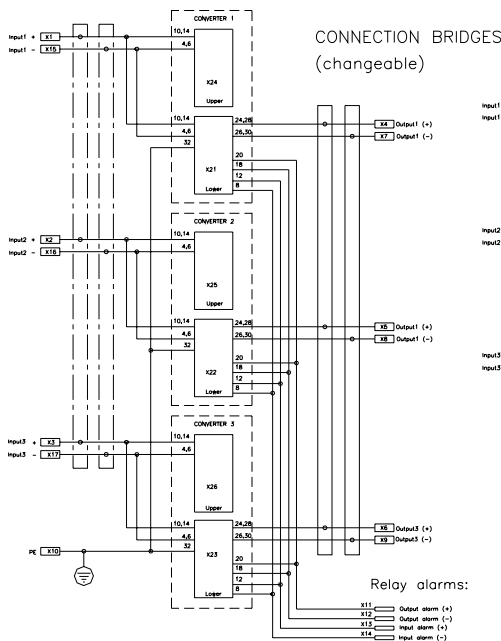
Type	Input	Output
DDC1870	Floating (± 24VDC)	Output + connected to chassis (-48VDC)
DDC7680	Floating (± 24VDC)	Output + connected to chassis (-60VDC)
DDC1810	Floating (± 48/60VDC)	Output – connected to chassis (+24VDC)
DDC4500	Floating (± 48/60VDC)	Floating (± 48VDC)
DDC4220	Input + connected to chassis (-48/60VDC)	Floating (± 60VDC)

## 19" 6U RACK CONNECTIONS

**MSR7330**  
Rack for DDC1870 and DDC7680

**MSR4860**  
Rack for DDC1810

**MSR4870**  
Rack for DDC4500 and DDC4220



*Customised sub-racks and distributions available on request*