

High efficient & wide input DC/DC converters

The Flatpack2 DC/DC converters make it possible to power 24V and 48V equipment not compatible with the available system battery back-up voltage.

The isolated CAN bus make it possible to hook the converters directly to the supplying system's controller for control and monitoring.



Datasheet Flatpack2 DC/DC

10 – 75 V_{DC} input – 24 V_{DC} or 48 V_{DC} output

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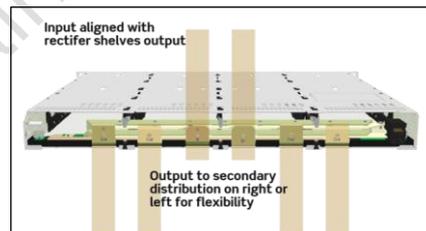
INDUSTRY APPLICATIONS

Telecom

- Mobile / Wireless
- Radio Base stations/ Cell Sites
- LTE / 4G / WiMAX
- Mobile Switching Center (MSC)
- Microwave
- Broadband

Fixed

- Central Office
- Telephony servers / switches
- Fiber Optics
- Microwave
- Cable
- Broadband
- Broadcast
- Datacenters



Flatpack2 DC/DC PR bus bar details



Smartpack2 controller

KEY FEATURES

- ✓ Wide input range
- ✓ High efficiency
- ✓ Isolated CAN bus
- ✓ Control and monitoring can be integrated seamlessly in supplying system controller

See reversed size for specifications

Datasheet Flatpack2 DC/DC



10 – 75 V_{DC} input – 24 V_{DC} or 48 V_{DC} output

Model	1350W 20-75/24V	1350W 20-75/48V
Part number	241115.600	241115.602
INPUT DATA		
Voltage	20 - 75 V _{DC}	
Current (maximum)	60 ²⁾ A _{DC}	
Protection	Fuse Reversed polarity protection	
OUTPUT DATA		
Voltage (default)	26 V _{DC}	53 V _{DC}
Voltage (adjustable range)	24 - 28 V _{DC}	48 - 58.5 V _{DC}
Power (maximum)	1350 ³⁾ W (de-rates for V _{IN} < TBD V to TBD W at V _{IN} = 20 V _{DC})	
Current (maximum)	56 A (@V _{OUT} = 24V _{DC})	28 A (@V _{OUT} = 48V _{DC})
Current sharing (10 - 100% load)	±5% of maximum current from 10 to 100% load	
Static Voltage regulation (10 - 100% load)	±1%	±0.5%
Dynamic Voltage regulation	±5.0% for 10-90% or 90-10% load variation, regulation time < 50ms	
Boost	150% of nominal current for 15s ¹⁾	
Quick trip current boost	Same scheme as for Micropack DC/DC	
Protection	Hot plug-in OR-ing diode Short circuit proof High temperature protection	
OTHER SPECIFICATIONS		
Efficiency @ 48V input	Typ >90%	Typ >92%
Isolation	1050 V _{DC} - input to earth 1650 V _{DC} - input to output 710 V _{DC} - output to earth 1650 V _{DC} - CAN to input 1650 V _{DC} - CAN to output	
Operating temperature	-40 to +75°C (-40 to +167°F), humidity 5 - 95% RH non-condensing Output power de-rates linear from 1350W @ 45°C (113°F) to 1250W (target) @ 65°C(149°F)	
Storage temperature	-40 to +85°C (-40 to +185°F), humidity 0 - 99% RH non-condensing	
Dimensions[WxHxD] / Weight	100 x 41.5 x 327mm (4.25 x 1.69 x 13") / 1.95 kg (4.3 lbs)	
DESIGN STANDARDS		
Electrical safety	UL 60950-1, EN 60950-1	
EMC Class B/B/B	ETSI EN 300 386 V.1.4.1 EN 61000-6-1 (immunity, light industry) EN 61000-6-2 (immunity, industry) EN 61000-6-3 (emission, light industry) EN 61000-6-4 (emission, industry)	
Environment	ETSI EN 300 019: 2-1 (Class 1.2), 2-2 (Class 2.3) & 2-3 (Class 3.2) ROHS compliant	
1) as good as it gets 2) as high as the existing plug can handle 3) major design parameter		