

DATASHEET

ACE254RUW48

4 Bay / 10 Kilowatt Power Shelf





Features

- Universal Rack for the CAR2548FP and CAR2548TN
- 10kW (7,500W N+1)
- Fully Hot-Pluggable and Redundant
- Remote Sensing
- LED Indicators
- Built-in Alarm Signals
- Full Protection Features
- World-Wide Safety Approvals

| KEY MARKETS & APPLICATIONS | | | | | |
|----------------------------|----------------------|---|--------------------------|--|--|
| • | Base Stations | • | Central Office Switching | | |
| • | Satelite Hubs | • | ATE Equipment | | |
| • | Networking Equipment | • | RF Amplifiers | | |
| • | Telecom Access Nodes | • | Distributed Power | | |

| FEATURES | BENEFITS |
|-----------------------------------|---|
| Single Wire Current Sharing | Provide system stress balancing and increases reliability |
| Constant Power Option | Better suited for battery charging applications |
| Constant Current Option | Designed for front-end bulk supply applications |
| Voltage Trimming Capability | Designed for float VRLA batteries |
| Control and Monitoring Signals | Allows for superior system control |
| Universal Input & Certificiations | Reduced logistic costs, meets world-wide standards |
| Built in Variable Speed Fan | Low noise and increased reliability |
| LVD and Controller Option | Complete system integration for telecom applications |

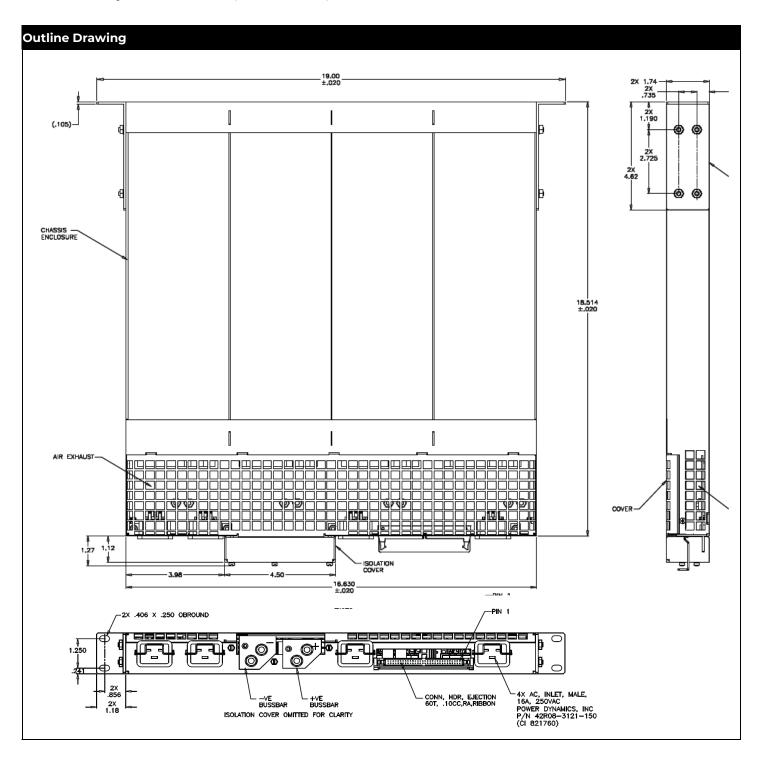


Technical Specifications

| SPECIFICATIONS | 10,000 Watt Power Shelf for Four CAR254 | 8 Front End & Rectifier Power Supplies | | | |
|-----------------------------------|--|--|--|--|--|
| Rectifier/Front-End Model | CAR2548TN | CAR2548FP | | | |
| Output Voltage | -54V _{DC} ±0.2V | +48V _{DC} ±0.1V | | | |
| Output Voltage Range | -42V _{DC} to -56V _{DC} | +43.2 to +52.8V _{DC} | | | |
| Maximum Output Power | IOkW (7,500W N+1 Redundancy) at High Line | | | | |
| Output Current | 208A at High Line and 48V _{DC} Operation | | | | |
| Input Voltage* | 180-264V _{AC} , 47-63Hz (Individual input feeds) | | | | |
| Max Input Current (per Module) | 16A@180V _{AC} | | | | |
| Maximum Inrush Current | 50A per input (per ETS 300 132-1) | | | | |
| Power Factor | 0.99 typical. Complies with IEC555, EN60555-2, EN61000-3-2 | | | | |
| Efficiency | 92% typical at nominal load and 230 V_{AC} . (85% at 90 V_{AC}) | | | | |
| Regulation - Line | ±2% of input power line | | | | |
| Regulation - Load | ±1% of load | | | | |
| Ripple and Noise | Complies with ETS300 132-2, 32dBnrc. Bandwidth: 25Hz - 20kHz. ±1% pk-pk with 0/luF ceramoc and 10uF electrotic caps at the output. | | | | |
| Load Sharing | Active single wire load sharing. Unit to share ±10% of full load. | | | | |
| Transient Response | 5% max deviation, 300usec recovery time @ 50% step load and di/dt < 1A/us | | | | |
| Status Indicators | AC good (GREEN), DC good (GREEN), FAULT (RED) | | | | |
| Alarm Signals | AC OK, AC High, DC OK, Temperature OK, Module Present, Current Monitoring, Remote ON/ OFF | | | | |
| Current Limit Protection | Self protected between the range of 110% - 130% of lout nominal | | | | |
| Overvoltage Protection (OVP) | 59V _{DC} ±1V | | | | |
| Temperature Range | -10C to 70C (Power derating above 50C at 2%/C)40C start up. | | | | |
| Shock & Vibration | IEC 68-2-27, MIL-STD-810E, 20G, Telcordia GR-63-CORE, GR-487-CORE | | | | |
| EMI/EMC | Class B (FCC and CISPR compliant) - EN55032 Level B. CE Marking Level B. GR-1089-CORE | | | | |
| Safety Approvals | UL: 487, 1012, 1950 CSA 22.2 No. 650 IEC: 380, 435, 950 VDE 0804, 0806 & CE Marked TUV | | | | |
| Dimensions | 1.74" x 19.00" x 18.07" (44.1mm x 482.6mm x 459.05mm) - including mounting ears | | | | |

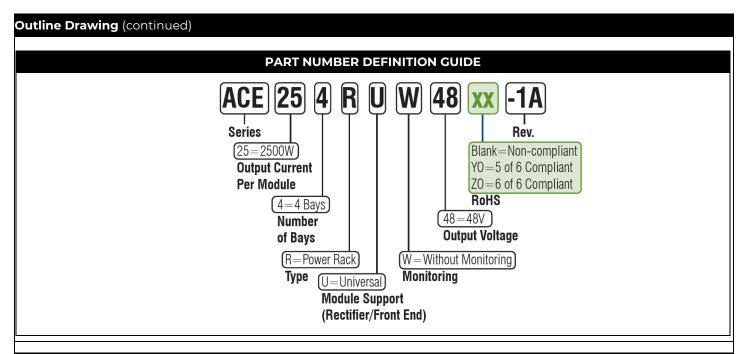


Technical Specifications (continued)





Technical Specifications (continued)



| PIN OUT INFORMATION | | | | | | | |
|---------------------|-----------|----|-----------|----|---------|----|------------|
| 1 | AC OK 1 | 16 | FAULT 2 | 31 | - | 46 | SDA |
| 2 | DC OK1 | 17 | AC OK 3 | 32 | FAULT 4 | 47 | WP |
| 3 | MODPRES 1 | 18 | DC OK 3 | 33 | - | 48 | RS+ |
| 4 | TEMP OK 1 | 19 | MODPRES 3 | 34 | - | 49 | RS- |
| 5 | ON/OFF 1 | 20 | TEMP OK 3 | 35 | - | 50 | Signal RTN |
| 6 | I MON 1 | 21 | ON/OFF 3 | 36 | - | 51 | - |
| 7 | - | 22 | I MON 3 | 37 | - | 52 | 3.3VSB |
| 8 | FAULT1 | 23 | - | 38 | - | 53 | 3.3VSB |
| 9 | AC OK 2 | 24 | FAULT3 | 39 | - | 54 | 3.3VSB |
| 10 | DC OK 2 | 25 | AC OK 4 | 40 | - | 55 | 3.3VSB |
| 11 | MODPRES 2 | 26 | DC OK 4 | 41 | - | 56 | - |
| 12 | TEMP OK 2 | 27 | MODPRES 4 | 42 | I_SHARE | 57 | 3.3VSB RTN |
| 13 | ON/OFF 2 | 28 | TEMP OK 4 | 43 | VPROG | 58 | 3.3VSB RTN |
| 14 | I MON 2 | 29 | ON/OFF 4 | 44 | INT | 59 | 3.3VSB RTN |
| 15 | - | 30 | I MON 4 | 45 | SCL | 60 | 3.3VSB RTN |

Contact Us

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Change History (excludes grammar & clarifications)

| Revision | Date | Description of the change |
|----------|------------|--------------------------------|
| 1.2 | 12/22/2021 | Updated as per template |
| 1.3 | 10/31/2023 | Updated as per OmniOn template |



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