

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

- | | |
|---|---|
| <ul style="list-style-type: none"> • Base Stations • Satellite Hubs • Networking Equipment • Telecom Access Nodes | <ul style="list-style-type: none"> • Central Office Switching • ATE Equipment • RF Amplifiers • Distributed Power |
|---|---|

FEATURES

BENEFITS

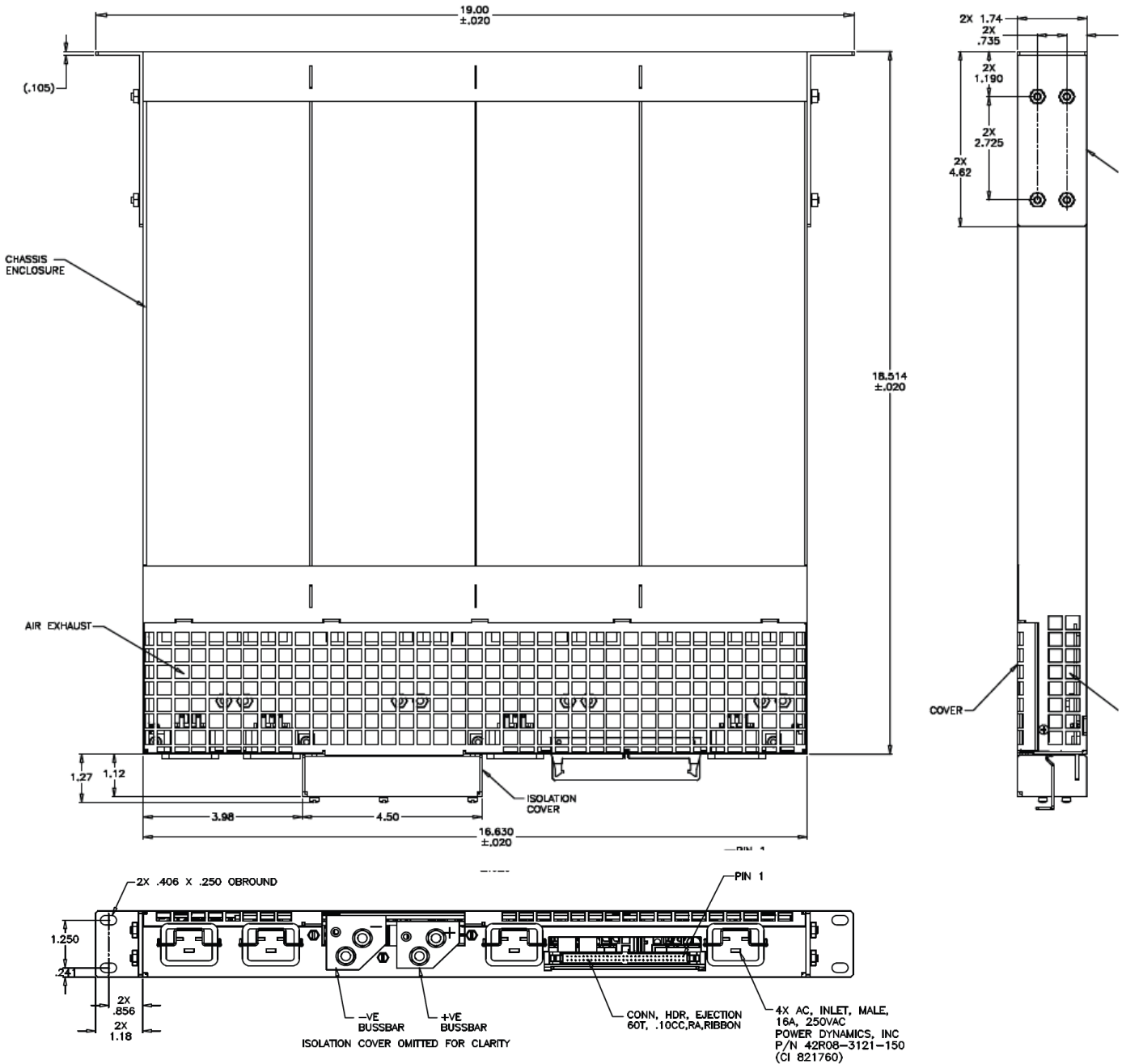
Single Wire Current Sharing	Provide system stress balancing and increases reliability
Constant Power Option	Better suited for battery charging applications
Constant Current Option	Designed for front-end bulk supply applications
Voltage Trimming Capability	Designed for float VRLA batteries
Control and Monitoring Signals	Allows for superior system control
Universal Input & Certifications	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 CAR2548 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	10kW (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 230V _{AC} . (85% at 90V _{AC})	
Regulation - Line	±2% of input power line	
Regulation - Load	±1% of load	
Ripple and Noise	Complies with ETS300 132-2, 32dBnc. Bandwidth: 25Hz - 20kHz. ±1% pk-pk with 0/1uF ceramic and 10uF electrolytic 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 I _{out} 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)

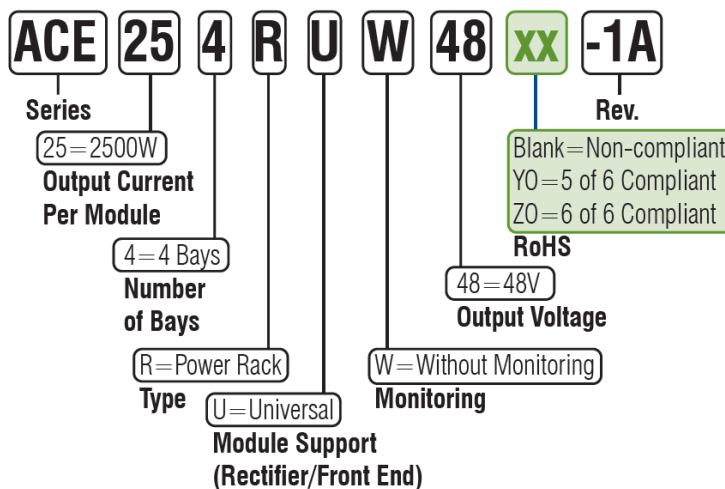
Outline Drawing



Technical Specifications (continued)

Outline Drawing (continued)

PART NUMBER DEFINITION GUIDE



PIN OUT INFORMATION

1	AC OK 1	16	FAULT 2	31	-	46	SDA
2	DC OK 1	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	FAULT 1	23	-	38	-	53	3.3VSB
9	AC OK 2	24	FAULT 3	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)

Version	Date	Description of the change
1.2	12/22/2021	Updated as per template



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