

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

### FEATURES

### BENEFITS

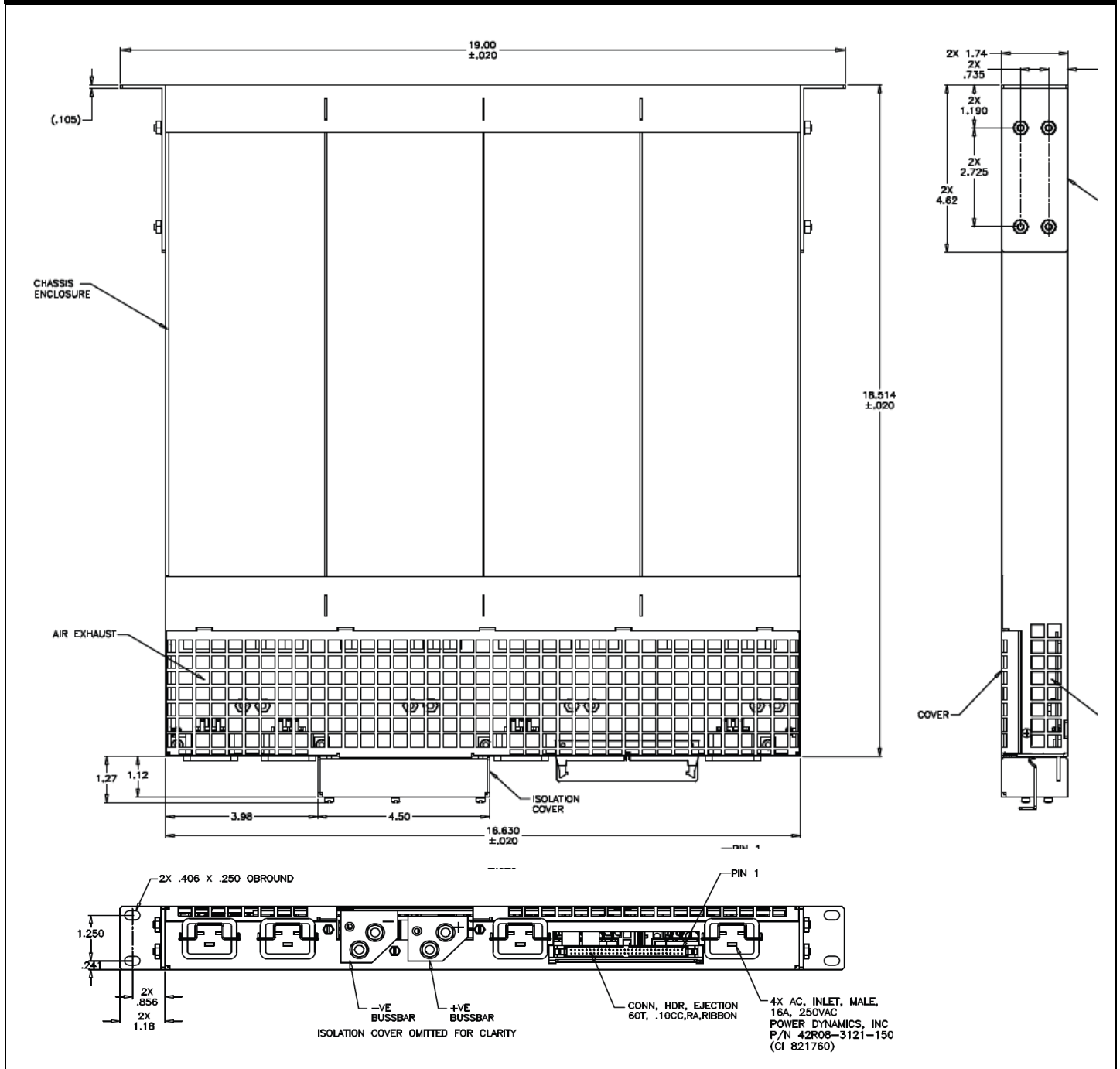
Single Wire Current Sharing	Provide system stress balancing and increases reliability
Constant Power Option	Better suited for battery charging applications
Constant Current Option	Designed for front-end bulk supply applications
Voltage Trimming Capability	Designed for float VRLA batteries
Control and 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 <sub>DC</sub> ±0.2V	+48V <sub>DC</sub> ±0.1V	
Output Voltage Range	-42V <sub>DC</sub> to -56V <sub>DC</sub>	+43.2 to +52.8V <sub>DC</sub>	
Maximum Output Power	10kW (7,500W N+1 Redundancy) at High Line		
Output Current	208A at High Line and 48V <sub>DC</sub> Operation		
Input Voltage*	180-264V <sub>AC</sub> , 47-63Hz (Individual input feeds)		
Max Input Current (per Module)	16A@180V <sub>AC</sub>		
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 <sub>AC</sub> . (85% at 90V <sub>AC</sub> )		
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 0/1uF 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 <sub>DC</sub> ±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)

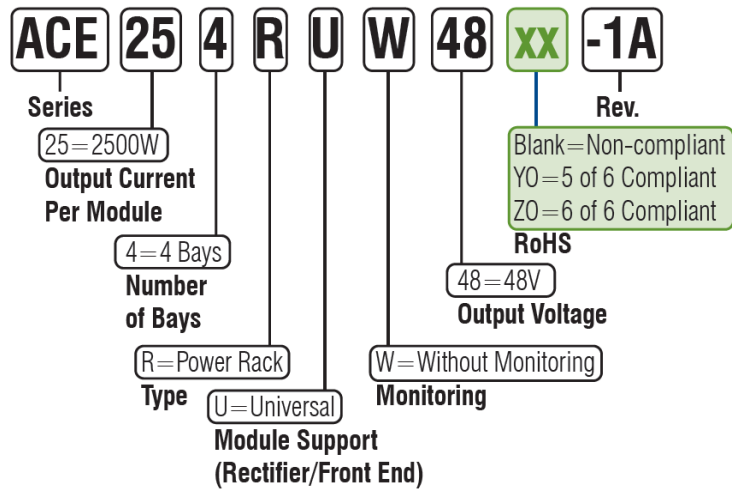
## Outline Drawing



# Technical Specifications (continued)

## Outline Drawing (continued)

### PART NUMBER DEFINITION GUIDE



### PIN OUT INFORMATION

1	AC OK1	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	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)

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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