

## SC1024 6RU Cabinet with integrated power and distribution



The SC 1024 Pole Mount Cabinet provides customers with 6RU of powered and protected rack mounting space for fast network deployments. Using a proven CC!600 environmentally hardened rectifier solution with an AC input configuration incorporating a generator plug with bypass and configurable output load distribution, the SC1024 Pole Mount cabinet provides an excellent solution for network providers to quickly deploy network services.

### Power for Easy Installations

The SC1024 Pole Mount Cabinet was developed to maximize power for small cell radio solutions while offering a feature set that simplifies installation.

- Hardened CC1600 outdoor rectifier to provide resilient robust power to load equipment.
- Integrated DC distribution provides protected connectivity for load equipment.
- Integrated Generator Plug with mechanically interlocked, manual transfer switch.
- Filtered forced air ventilation removes heat from the cabinet to maintain proper thermal performance.
- Shipped to mount directly to power, lighting and telephony poles with options for frame mounting.
- Separate power and equipment chambers ensure safe maintenance for network equipment.

### Features & Advantages

- Generator plug with mechanically interlocked manual transfer switch
- Flexibly provides 1600 Watts of -48 Volt power
- Optional Service entrance rated AC input
- Full power operating temperature range for outdoor deployments (-40°C through +46°C)
- Starts and runs at any AC voltage from 95 to 275 V<sub>AC</sub>
- Integrated DC distribution for load protection
- Serviceable field replaceable air filters and fan assemblies without interfering with network equipment
- 6 Knockouts for end user equipment loads (3, 1.5" and 3, 1")

# Technical Specification

## Electrical Specifications for System Design

OmniOn's SC1024 utilizes the CC1600-SC55 Outdoor single-phase rectifier for DC power which provides efficient energy transfer from available outdoor AC sources into the 48 Volt Nominal DC power needed for communications equipment.

### Input

Parameter	MIN	TYPICAL	MAX
Voltage Range			
High-Line	175V <sub>AC</sub>	220V <sub>AC</sub>	265V <sub>AC</sub>
Low-Line	85V <sub>AC</sub>	110V <sub>AC</sub>	140V <sub>AC</sub>
Frequency	45Hz	60Hz	66Hz
Power Factor @ >50%	98%	99.5%	99.8%
Total Harmonic Distortion			5%

### Output

V <sub>OUT</sub>	42-58 V <sub>DC</sub> range. Default = 55.5V <sub>DC</sub> ±1%
I <sub>OUT</sub>	22A @ Low line input; 29A @ High line input
Regulation	±0.5%
Ripple	100 mV <sub>rms</sub> , 250 mV <sub>p-p</sub>
Efficiency	95.7% Peak

### Mechanical

Height (in./mm)	26.4/ 670.6
Width (in./mm)	21.26/ 540
Depth (in./mm)	21.37/ 542.8
Weight (Lb/Kg)	80 / 36.3

### Environmental

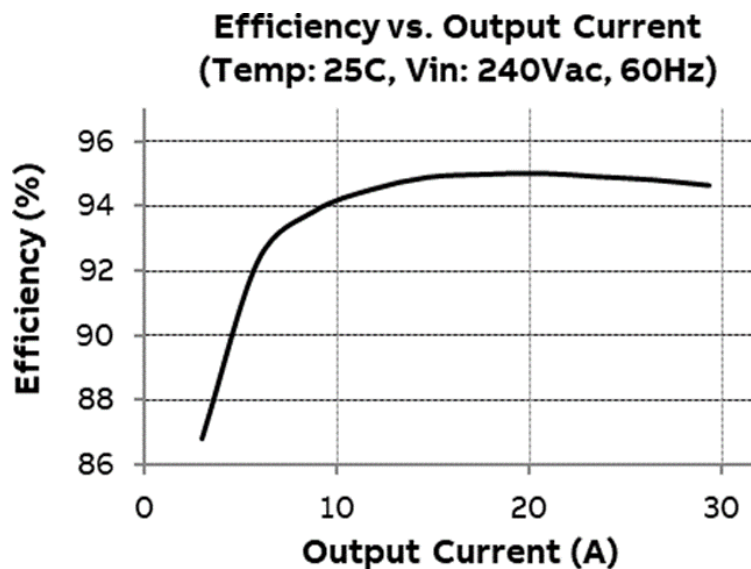
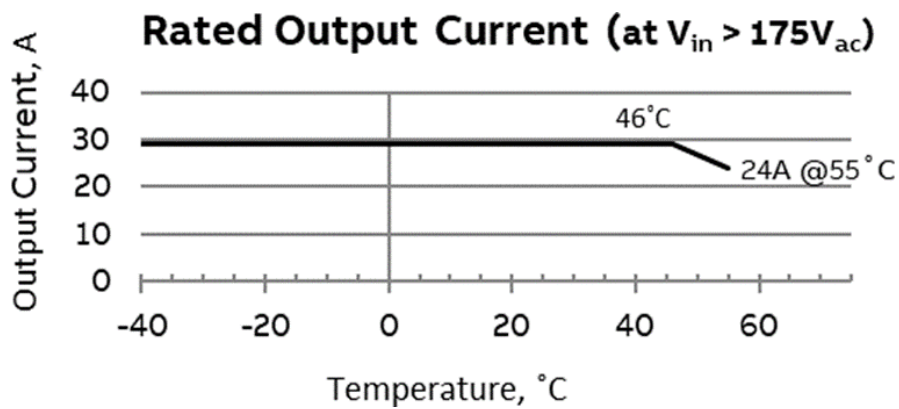
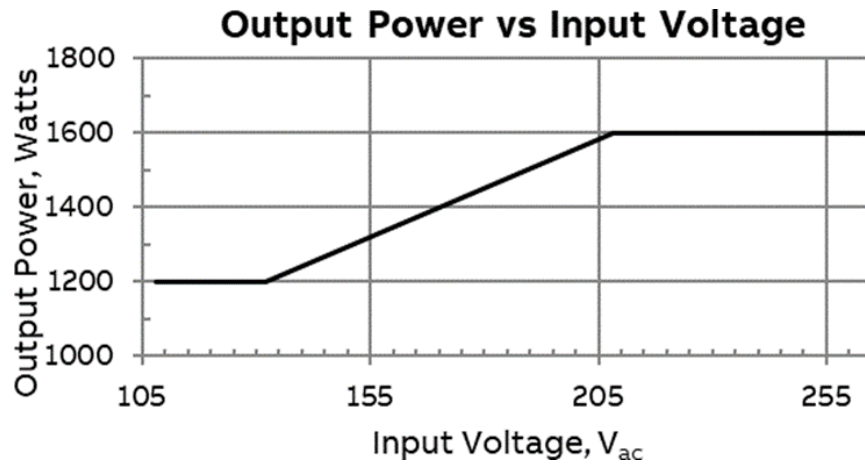
Operating Temperature	-40°C to +65°C (-40°F to 115°F) Output derates 2%/C beginning at +46°C
Storage Temperature	-40°C to +85°C (-40°F to 185°F)
Relative Humidity	0 - 100%
Protection Class	GR487 Wind Driven Rain, IP65
Altitude	4800 feet

### Agency Certifications

EMC Performance	FCC Part 15, EN 55032 (CISPR32), EN 55035, Level A, GR-1089
Safety	ANSI/UL60950-1-2014, EN60950-1 2nd ed+A1+A2, CAN/CSA C22.2 No. 60950-1- 07 +Am2: 2014, NEBS GR- 1089, GR-63-CORE, CE, RoHS6/6, GR-3108 Class 4
Lightning Surge	EN/IEC 61000-4-5 Level 4 (Error free), ANSI C62.41 Category B 100 kHz ring and 1.2/50µs combination waves (6kV damage free); ITU-T K.45, Telcordia GR-1089

## Technical Specification (continued)

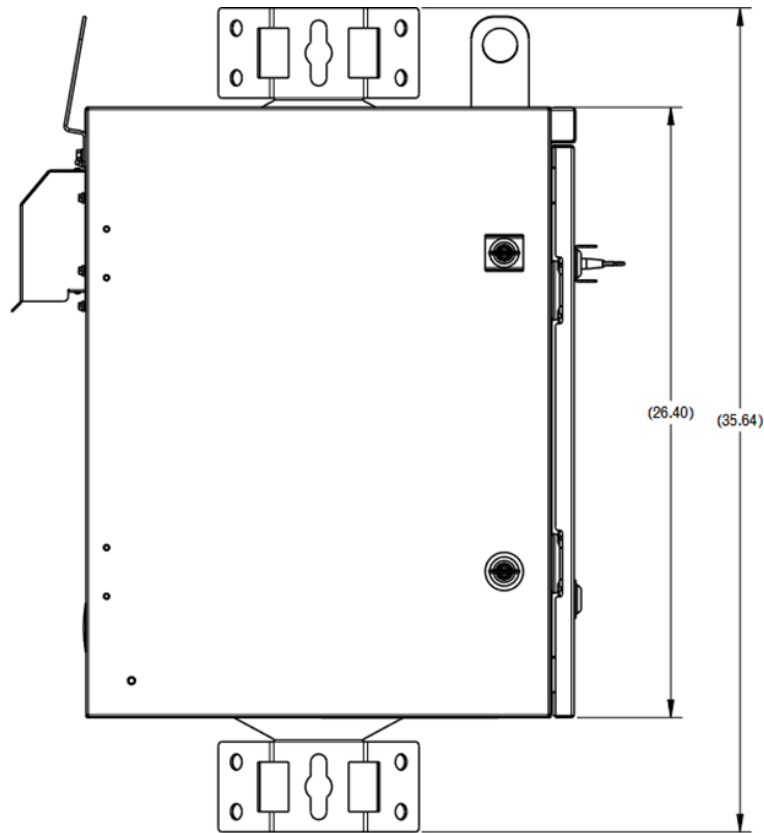
### Characteristics Curves



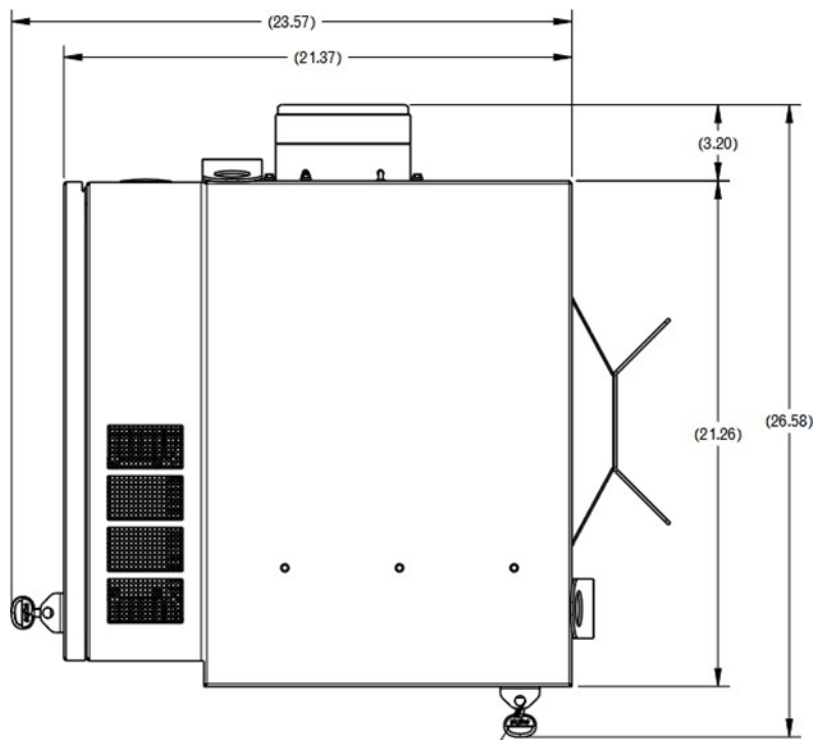
# Technical Specification (continued)

## Mechanical Specifications

### Drawings




SIDE VIEW  
AC CABINET SIDE



## Technical Specification (continued)

### SC1024 Cabinet Ordering Information

Ordering Code	Description	Picture
1600439872A	SC1024 CC1600 6U Fan Cooled Side Mount	

### Spares and Replacement Parts

Function	Ordering Code	Description
Rectifier	1600131299A	CC1600SC55SXZ01A Rectifier
Thermostat	7T.81.0.000.230x	Ventilation control - Blue Dial
Replacement Fan	QFR1248GHE/ QFR1248GHE-SP01	DC Fans DC Tube axial Fan, 120x38mm, 48V <sub>DC</sub> , Ball Bearing, Lead Wires, Locked Rotor Sensor
Air Filter	357-011-160	POLY KLEAN AFP10 707
AC Input Breaker	4600430322P	SU202M-K20 Miniature Circuit Breaker - 2P - K - 20A
Rectifier Breaker	8600071043P	S202-C16 Miniature Circuit Breaker - 2P - C - 16 A
Outlet Breaker	4600430914P	S201-C16 Miniature Circuit Breaker - 1P - C - 16 A

### Cabinet Internal Views



AC Input and CC1600 rectifier compartment



6RU Equipment compartment

## Change History (excludes grammar & clarifications)

Revision	Date	Description of the change
1.0	03/08/2024	Updated as per OmniOn template

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