

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_{AC}
- 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 _{AC}	220V _{AC}	265V _{AC}
Low-Line	85V _{AC}	110V _{AC}	140V _{AC}
Frequency	45Hz	60Hz	66Hz
Power Factor @ >50%	98%	99.5%	99.8%
Total Harmonic Distortion			5%

Output

V _{OUT}	42-58 V _{DC} range. Default = 55.5V _{DC} ±1%
I _{OUT}	22A @ Low line input; 29A @ High line input
Regulation	±0.5%
Ripple	100 mV _{rms} , 250 mV _{p-p}
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

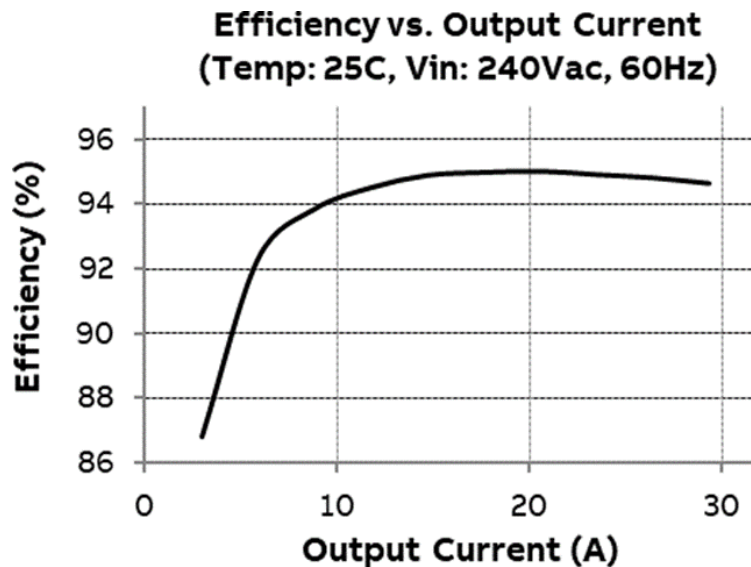
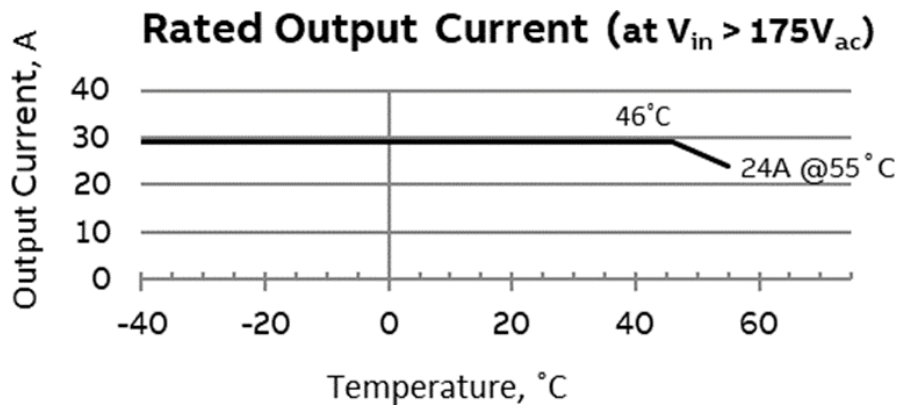
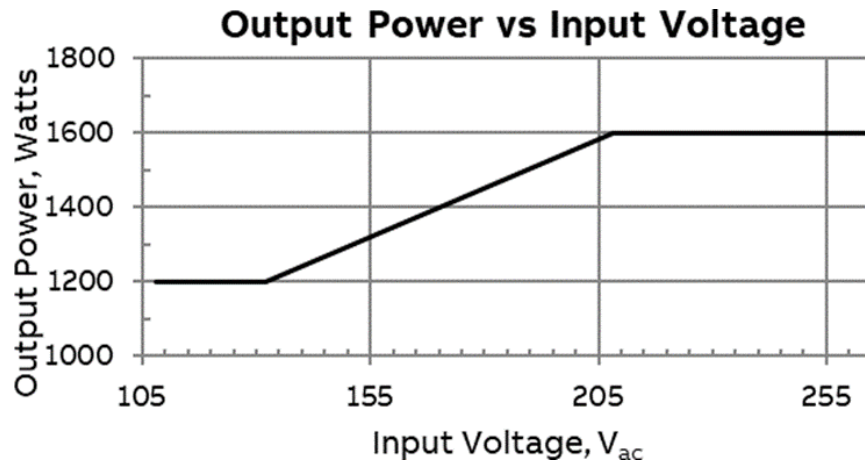
Operating Temperature	-40°C to +65°C (-40°F to 115°F) Output derates 2%/C beginning at +46°C
Storage Temperature	-40°C to +85°C (-40°F to 185°F)
Relative Humidity	0 - 100%
Protection Class	GR487 Wind Driven Rain, IP65
Altitude	4800 feet

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)

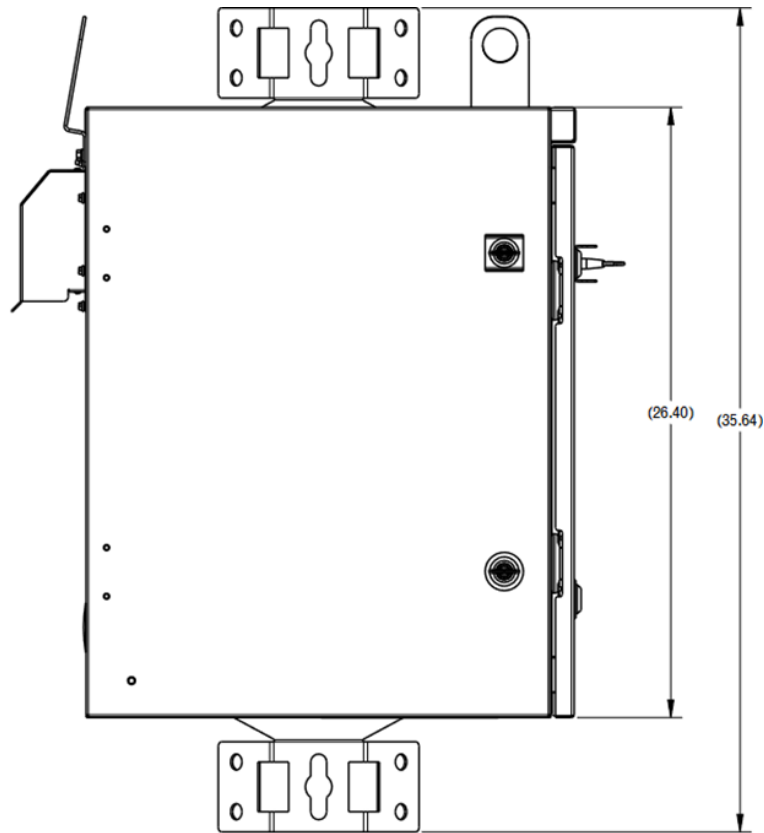
Characteristics Curves



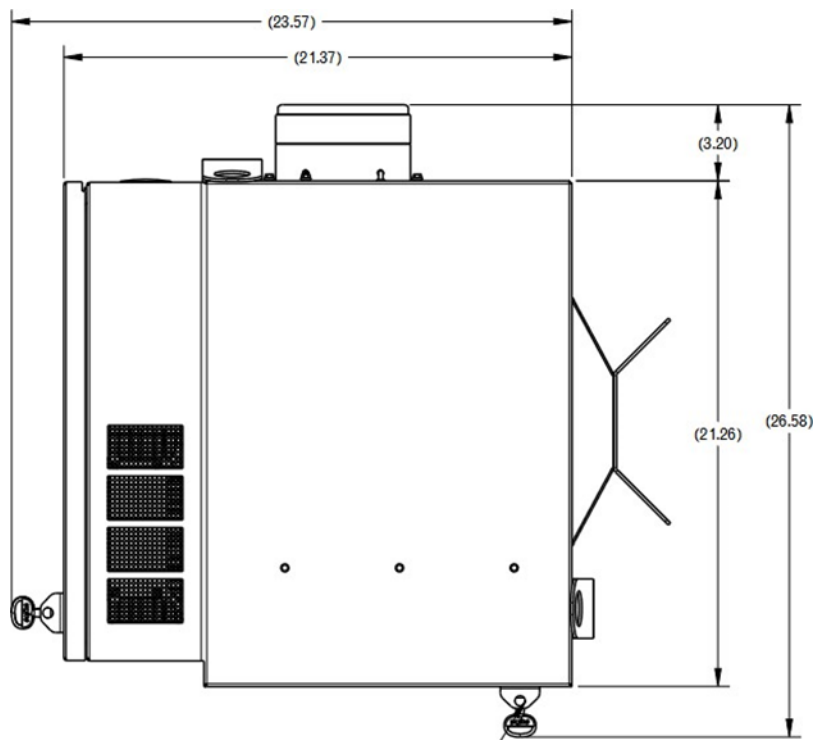
Technical Specification (continued)

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 _{DC} , 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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