

MC-SBC-1CWB

Single CWB Charger

- Personal charger for Conformal Wearable Batteries (BB/2525/U)
- Switch mode charger with universal input voltage
- LED status indicator



LENGTH	WIDTH	HEIGHT	WEIGHT
5.31" (135 mm)	3.15" (80 mm)	1.73" (44 mm)	0.86 lbs (390 g)

Inventus Power Part Number	980139-US
Model Number	MC-SBC-1CWB-BLK
Input Rating	Nominal 90-264VAC
Maximum Output Power	59W
Battery Charge Configuration	4s
Switch Frequency	≈ 40kHz
Battery Leakage Current	<1mA- <0.4mA @ 8.4V
Operating Temperature	-25°C to +40°C
Storage Temperature	-25°C to +85°C

Ripple	Class II
Electrical Safety Approvals	EN 60335-2-29, EN 60950-1, in compliance with UL 60601-1
EMC Standards	EN 60601-1-2 (Medical), EN 61000-6-3 (Emission), EN 61000-6-1 (Immunity)
Termination	Current detection as charge terminator < 750mA +/- 30%
Input Connection	2 pin IEC 320-C7 (input cordset included)
Output Connection	GlenAir Connector 8070-1676-06ZNU6-6PY-422B
Color	Black

FUNCTIONALITY

Once the charger is attached to a lithium-ion battery and plugged in, the charging process will begin. The charger will subject the Conformal Wearable Battery (CWB) to Constant Current / Constant Voltage (CC/CV) with a taper current to 300 mA.

1. Fast charge mode. During this step, the charger is in constant current mode with the current rate remaining at its maximum rating.
2. The battery will be nominally 80-95% charged (LED changes to orange), and the charger switches into constant voltage mode (current is no longer being provided at its maximum rate). The charger will continue to provide a constant voltage until the charge current decreases to the charge termination level.
3. The charge process stops. Charging has ceased as no current flows to the CWB.

Versions			Charge Control			
			Step 1 (red)	Step 2a (red)	Step 2b (orange)	Step 3 (green)
Model #	Battery Charge Configuration	Max Output Power (W)	Constant Charge Current	Constant Charge Voltage	To Orange When Current is	Charge Complete Vbat
MC-SBC-CWB1-BLK	4	59W	3.5A +/- 0.2A	16.8V +/- 0.1V	1.6A +/- 0.1A	16.4V +/- 0.1V

LED STATUS INDICATOR

The Single CWB Charger has an LED status indicator to inform the user of its status. During step 1, the LED will appear red in color. While in step 2, the LED will appear orange in color. During step 3, the LED will appear green in color.

