

Phone: 201-342-3338 Fax: 201-342-3339 www.cciproducts.com

# UMTS 850 Band MetroCell Amplifier CCI Model Number SCB-850-1W-ALU-OD-1 USER'S GUIDE

## Product Description:

### SCB-850-1W-ALU-OD-1 UMTS MetroCell Amplifier (850 Band):

The CCI UMTS 850 Band MetroCell Amplifier Module consists of a Digital Pre-Distortion Downlink power amplifier capable of generating a minimum 1 Watt UMTS signal.

### **Operation Description:**

The SCB-850-1W-ALU-OD-1 850 Band MetroCell Amplifier Module is designed to supply a maximum output power level of 1 Watt (+30.0 dBm). Although the gain of the Amplifier is fixed, the output can be adjusted by setting the input power level.

### **Operation and Installation Instructions:**

The following instructions should be followed when installing the unit in service:

- Apply a 48 VDC input voltage to the POE+ Input connector of the 850 Band MetroCell Amplifier Module.
- Insure that the DC Source is capable of delivering up to 0.4 Amps at 48 VDC.
- Apply a UMTS signal up to +24 dBm (250 mW) to the BTS Input port of the 850 Band MetroCell Amplifier Module.

Note: "System Level" usage (see typical site installation block diagram on page 2) is based on the input signal from the Small Cell BTS set to the maximum rated power of +24 dBm.

- Check the Antenna 2 output to insure proper output power is present (BTS<sub>IN</sub> 6.0 dB ≤ ANT<sub>OUT</sub> ≤ BTS<sub>IN</sub> -4.0dB).
- Check the TX/RX output to insure proper output power is present (BTS<sub>IN</sub> + 5.5dB (± 0.5 dB)).
- Adjust the input power level to insure the output power level is in compliance with the values indicated in the table on page 2.



### Figure 1 - "Typical Site Installation Config." Block Diagram for AWS 80W Cell Extender

#### Setting the RF Output Power to the SCB-850-1W-ALU-OD-1 MetroCell Amplifier:

The RF output power is not adjustable on the UMTS850 Band Amplifier. The user must adjust the RF input power to the SCB-850-1W-ALU-D-1 such that the RF output power level does not exceed the levels shown below in order for the RF output spectral emissions to be compliant with the FCC spurious emissions limit of -13 dBm outside of the assigned frequency block. These levels must not be exceeded. The total output power at the TX/RX terminal of the device must not exceed the peak output power of 1W.

Center Channel	Maximum RF
Frequency (MHz)	Output (Watt)*
869 - 894	1

\*Note: The Maximum RF Output Power is after any passive losses after the Small Cell Amplifier Module such as filters and cables.

This equipment complies with Part 22 of the FCC rules. Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

In order to comply with FCC rules for RF exposure, it must be observed that the antenna connected to this equipment be fixed on an outdoor structure and that it must have a minimum separation distance of 10 meters between it and any person.

CCI does not provide antennas, cables and/or coupling devices for this product. Only antennas, cables and/or coupling devices which are authorized by ALU (Alcatel-Lucent) should be utilized with this UMTS 850 Band MetroCell Amplifier.