

Microlab, a Wireless Telecom Group company, offers DCC Series™ integrated solutions to enable fast and efficient integration of passive and active components for In-Building Wireless, outdoor DAS, and Small Cell applications. DCC Series™ integrated solutions support a wide variety of configurations including: Multi-Band / Multi-Operator Low-Loss Combining (Point-of-Interface) for D-RAN, RRU and Small Cell, Signal Conditioning for Active DAS Head-End applications, and customized integrated passive products for Small Cell & ODAS applications.

Microlab's DCC platform utilizes our high performance components to provide a high level of integration and quality with guaranteed performance. Our solutions allow customers and integrators to optimize and simplify their designs, reduce installation and test time, and achieve higher performance along with faster time to market.

## Features

- Supports frequency bands from 130 MHz to 2700 MHz to address commercial DAS and Public Safety (VHF/UHF) wireless services
- Low Loss architecture for maximum RF Transmission
- Guaranteed Low PIM; available in latest 4.3-10 connector interface
- POI Power Levels up to 150W per port with high isolation
- Signal conditioning for 5W Small Cell or 60W RRU applications offering independent uplink and downlink variable attenuation for link budget optimization
- Monitor ports for uninterrupted system monitoring and dynamic system optimization
- High performance components and terminations - fully-tested to ensure spec compliance



## DCC Combiner / Point-of-Interface (POI) Solutions for D-RAN

Microlab has extensive expertise building high-performance low-loss combiners (POI's) for D-RAN applications. For the Royal Arena in Copenhagen, Microlab designed a 9-input, 2-output DCC for 3 operators and 3 bands achieving less than 5.7dB nominal RF loss per output. This improved the RF loss by 4.3dB compared to a conventional broadband all-hybrid design while also optimizing for Low-PIM and better than 55dB inter-band isolation.



DCC601-B19



## DCC Signal Conditioning Solutions

Microlab DCC Signal Conditioning products are used extensively in Stadiums, Venues, Hotels, and Enterprises where pools of BTS sources require conversion to independently controlled simplex inputs for Active DAS head-ends.

The independent uplink/downlink adjustments offer customers the ability to optimize dynamic range for the downlink as well as minimize uplink DAS noise rise to improve throughput and capacity.

### Venues

- Microsoft, WA
- Fidelity, MA
- Edward Jones, MO
- Bowling Green State Univ, OH
- Intermountain Medical Center, UT
- Chicago O'Hare airport, IL
- Windward Mall, Oahu, HI
- Alderwood Mall, MA
- Nike HQ, OR
- State Farm Insurance, WA
- Dena'ina Convention Center, AK
- St. Luke's Hospital, WA

## Customized Integrated Passives for Small Cells & C-RAN hubs

With the proliferation of small cells as a means of increasing capacity, Microlab has partnered with customers to create integrated passive solutions to meet both electrical and mechanical requirements for C-RAN hubs and outdoor small cell.

By integrating components, the design can be optimized electrically for key parameters, allowing for maximum RF transmission and lowest PIM. Microlab is also able to create custom mechanical designs which reduce the size of sub-assemblies and allow them to drop-in during installation. These significantly reduce onsite installation complexity and test time, and provide more consistent results during installation, commissioning, and operation.

The **CY-A03** combines Microlab's industry-leading CM-80 hybrid combiner with pre-installed low-PIM terminations and brackets for small cell deployments using a quasi-omni configuration.



CY-A03

## Integrated Solutions for your Application

For more information about Microlab's DCC Series™ integrated solutions, please contact your local Microlab Sales Representative or visit us at [www.microlabtech.com](http://www.microlabtech.com)