

What can MCPAs do for you?

MCPAs work as a megaphone for the tower

- **Extends coverage** or **increases** capacity of wireless base stations.
 - An alternative to Cell Splits and antenna or feed line additions.
 - MCPA implementations are **highly configurable** in indoor and outdoor enclosures with full RF band filtering, flexible platform, standard field replaceable units, scalable capacity and easy onsite reconfiguration.
 - Provide more downlink power to **extend the coverage** (matching the uplink sensitivity).
 - To maintain system performance while adding capacity and/or **reduce holes in coverage**.
 - **Consolidate sites** and maintain capacity and coverage.
 - **Combine a growing number of channels** into a small number of antenna feed line for **higher capacity** results in power loss and upsets the link balance. MCPA solves this problem by adding the necessary power to make up the combining loss and restore the link balance.
 - Works with existing BTS and equipment (drop in).
 - MCPA Frequency Bands 850, 900, 1800 and 1900 MHz with the lowest system power consumption for all 850 MHz configurations.
 - MCPA are designed to **maximize RF link budgets** and can **improve spectral efficiency** by mitigating the need for guard bands between carriers. Decreased sites also help **improve co-channel frequency reuse**.
- Underpowered channels from the base station produce insufficient coverage the MCPA solves this problem by providing **more downlink power to extend the coverage (matching the uplink sensitivity)**.
 - **Capacity**—finite number of calls that can be handled on a site and once capacity limit is reached site begins “blocking” calls.
 - As traffic on a site increases capacity must grow. First plan of attack to add capacity is typically to add antennas. Requires additional feeders. Impact to tower loading and lease costs.
 - Provide operators with the ability to deploy sites with **maximum link budget parameters** leading to optimal radio performance.
 - MCPA used as an **ACTIVE COMBINER** allow additional carrier power and/or capacity to be deployed at sites without loss of cell range resulting in **fewer site deployments**.
 - MCPA facilitate **multi-mode RADIO TECHNOLOGY** deployments onto existing tower structures leading to **reduced OPEX**.
 - Minimize site build and maximize coverage, capacity and data throughput, **minimizing dropped calls**.

