

SC™4812T-MC
800 MHz Multicarrier BTS:

- **MORE FLEXIBILITY**
- **DYNAMIC RF POWER**

IS95 A / B / CDMA2000



SC4812T-MC @ 800 MHz



SC4812T-MC Multicarrier BTS Overview

INCREASED FLEXIBILITY

Motorola's new SC4812T-MC base station offers operators more flexibility than ever before. The SC4812T-MC base station incorporates all of the features and functionality of the SC4812T product, with the added benefit of Multicarrier LPA operation. This functionality enables dynamic power allocation across both sectors and carriers for maximum power efficiency and flexibility.

Based on the industry leading and field-proven Super Cell (SC) architecture, the SC4812T-MC base station is designed for optimum efficiency in medium to high capacity cell sites. The SC4812T-MC base station addresses the need for scalable power, improvements in operating efficiency and an increase in deployment flexibility.

DYNAMIC RF POWER

- **Multicarrier Trunking – Scalable, efficient use of power**

The SC4812T-MC is the first Motorola CDMA BTS to utilize an innovative linear trunking method that provides more efficient use of RF power than ever before. The SC4812T-MC power output of every LPA is dynamically shared across both sectors and carriers for maximum efficiency. The RF power is allocated based on traffic loading. This allows the cell site to handle traffic that would otherwise go unserved. The result is an increase in operational flexibility and higher effective power.

- **Intelligent Performance – Power output flexibility**

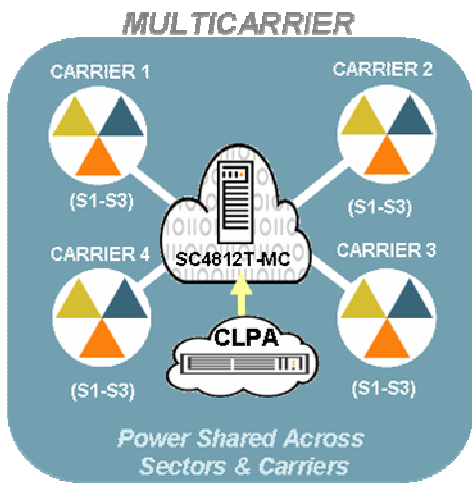
In addition to the efficient use of RF power, the SC4812T-MC introduces the ability for operators to add carriers to the BTS without having to add LPAs. Likewise, LPAs can be added without having to add carriers. This enables operators to size their power to fit the requirements of each site. This enhancement reduces costs, operating expenses, and increases flexibility.

SC4812T-MC Key Benefits continued

High Quality Service Provision

- **Smooth Migration – Minimizes service disruption during evolution**
Motorola's cdma2000 1X architecture builds upon existing 2G or 2.5G networks and adds packet based network elements as well. As operators migrate, existing equipment remains in the network to serve the existing traffic. The re-use of this equipment within the current architecture facilitates the protection of current investments. It also allows for an orderly migration from 3G to DO with minimal risk to existing revenue streams.

- **Packet Backhaul – Increase data rates with IP Backhaul**
The SC4812T-MC utilizes the BTS Router to provide bandwidth-efficient IP transport of voice and data bearer traffic, as well as maintenance, control, and signaling traffic for backhaul to the BSC.



SC4812T-MC SPECIFICATIONS

Frequency Range:

Base Transmit: 869 – 894 MHz

Base Receive: 824 – 849 MHz

Carrier Capacity:

3-Sector: 4 Carrier / Frame (8 Carrier / Site)

6-Sector: 2 Carrier / Frame (4 Carrier / Site)

Physical Channels:

IS95A/B: 288 / Frame

CDMA2000: 768 / Frame

Nominal* Power Output:

Standard Power: 420 Watts per BTS (35W per module)
(35W simultaneous power across all sector-carriers)

High Power: 560 Watts per BTS (35W per module)
(47W simultaneous power across all sector-carriers)

Specified Power Output:

Standard Power: 324 Watts per BTS (27W per module)
(27W simultaneous power across all sector-carriers)

High Power: 432 Watts per BTS (27W per module)
(36W simultaneous power across all sector-carriers)

Cabinet Dimensions:

1800mm (H) x 800mm (W) x 685mm (D)

Cabinet Weight:

500kg / 1100lbs

Cabinet Power:

+27 VDC / -48 VDC

Operating Temp:

0°C to +50°C

*Nominal performance tested in room temperature

STANDARDS

Compliant with FCC standards

For further information visit:

www.motorola.com/networkoperators



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