

## SC™4812T Lite 800 MHz BTS

- *Optimized Redundancy*
- *Enhanced RF Power*
- *Growth Flexibility*

IS95 A / B / CDMA2000



SC4812T Lite @ 800 MHz



## SC4812T Lite

The Motorola SC4812T Lite base station delivers macro feature capability in a cost efficient BTS package. This base station is ideal for deployment in rural and semi-urban environments where coverage is a priority over capacity. The SC4812T Lite base station is designed to accommodate RF applications in low to medium capacity networks with sensitivity towards reduced start-up costs and high reliability. This enables a quick return on investment and utilization of the industry proven 4812 Super Cell family of CDMA base stations products.

### *Optimized Redundancy*

Motorola's new SC4812T Lite base station offers operators a new level of configuration variability within the macro BTS product line. The SC4812T Lite base station incorporates the highly valued features and functionality of the SC4812T product in a two carrier configuration with the added benefit of optimized redundancy.

Optimized redundancy provides a BTS equipment configuration that eliminates specific hardware devices. Deployment of this product in the network enables the operator to minimize capital outlay, while maximizing coverage and availability. As a result, operators achieve quick, reliable service and reduced cost of ownership.

### *Enhanced RF Power*

The SC4812T Lite base station utilizes the innovative Linear Power Amplifier (LPA) trunking system to provide more efficient use of RF power than ever before. The SC4812T Lite power output is dynamically shared across each sector within the carrier set, to maximize efficiency and enable power to the sector based on traffic loading. This LPA trunking benefit, coupled with the SC4812T Lite filtering solution, enables increased power output for the SC4812T Lite base station. This allows for a larger cell radius and subsequent reduction to total BTS cells.

### *Growth Flexibility*

The SC4812T Lite base station offers superior growth flexibility from initial system deployment (particularly in the Optimized Redundant configuration) to high capacity network deployment. As a network grows from a single carrier, to additional carriers with remote channel activation, the SC4812T Lite BTS can support growth through four carriers to maximize the return on investment and support the network operator's cycles of system growth.



**SC4812T Lite Key Benefits** continued

**High Quality Service Provision**

- *Integrated Filtering – The redesigned filtering solution improves the RF efficiency of the BTS.* Combining the functionality of the filter and duplexer, the SC4812T Lite base station allows for improved output power through efficiency of the RF path, while maintaining a full filtering solution inclusive of the BTS frame.
- *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 to DO with minimal risk to existing revenue streams.
- *Packet Backhaul – Increase data rates with IP Backhaul* The SC4812T Lite 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 Lite SPECIFICATIONS**

**Frequency Range:**

*Base Transmit:* 869 – 894 MHz  
*Base Receive:* 824 – 849 MHz

**Carrier Capacity:**

*3-Sector:* 2 Carriers / Frame  
 4 Carriers per Site with Expansion BTS

**Physical Channels:** 256 / Frame

**Typical Power Output:** 210 Watts per Frame (35W per module)

**Specified Power Output:** 180 Watts per Frame (30W per module)

**Cabinet Dimensions:** 1410mm (H) x 700mm (W) x 685mm (D)

**Cabinet Weight:** 350kg / 775lbs

**Cabinet Power:** +27 VDC / -48 VDC

**Operating Temp:** 0°C to +50°C

**STANDARDS**

Compliant with FCC standards

For further information visit:  
[www.motorola.com/networkoperators](http://www.motorola.com/networkoperators)



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