

# MovingMedia® 6000 Node B Base Stations

## NB6411 AND NB6433

PORTFOLIO OF TD-CDMA BASE STATIONS PROVIDING INDUSTRY LEADING CAPACITY AND PERFORMANCE



- **STANDARDS-BASED**
- **HIGH CAPACITY**
- **HIGH SCALABILITY AND MODULAR DESIGN**
- **CAPACITY IMPROVEMENT**
- **HIGH AVAILABILITY**

The UTStarcom MovingMedia® 6000 NodeB base stations receive and transmit radio signals and process physical layer functions such as channel coding, modulation and de-modulation amongst a host of other functions. The NodeB complies with the 3GPP standard-based UMTS TDD (TD-CDMA) specification.

UTStarcom provides two different NodeB products in the MovingMedia 6000 portfolio at this time. NB6433 is the high-capacity TD-CDMA base station, providing 3-sector RF coverage and 3-sector traffic capacity. NB6411 is the lower-capacity TD-CDMA base station providing up to 3-sector RF coverage and 1-sector traffic capacity. UTStarcom MovingMedia 6000 base stations can be co-located with the RNC (Radio Network Controller) to ensure space savings and enhanced network performance. At the same time, the base stations and RNC can be deployed in separate locations depending upon network configuration requirements.

### KEY FEATURES AND BENEFITS

**Standard-based:** Based on the 3GPP UMTS Release 5 TDD standards.

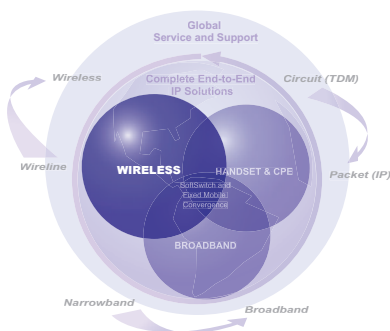
**High Capacity:** Support for 3-sector RF coverage and 3-sector traffic capacity ensures industry-leading capacity. With Downlink:Uplink 9:3 time slot split, the following throughput can be achieved:

| Frequency Reuse | Chip rate | Peak DL (Mbps) | Peak UL (Mbps) | Avg DL (Mbps) | Avg UL (Mbps) |
|-----------------|-----------|----------------|----------------|---------------|---------------|
| 1               | 3.84 Mcps | 5.2            | 0.848          | 1.9           | 0.7           |
| 3               | 3.84 Mcps | 5.2            | 0.848          | 2.3           | 0.7           |
| 1               | 7.68 Mcps | 11             | 1.7            | 4.5           | 1.45          |
| 3               | 7.68 Mcps | 11             | 1.7            | 5.1           | 1.45          |

**High-Scalability and Modular Design:** The MovingMedia 6000 NodeB portfolio's modular design ensures a smooth, linear capacity expansion without affecting ongoing service and connection.

**Capacity Improvement:** Downlink enhancement via High-Speed Downlink Packet Access (HSDPA) is enabled by adding 16QAM modulation to the downlink, which doubles the throughput achieved with QPSK. Uplink can be improved by adjusting the TDD uplink / downlink boundary and by advanced multi-user Detection Schemes (AMUD).

**Availability:** UTStarcom MovingMedia 6000 solutions can be deployed in either 5MHz or 10MHz spectrum in the 3400-3600Mhz licensed frequency band.



## PHYSICAL INTERFACES

- Iub interface
- Ethernet x1, E1/T1 x4, E3/T3 x 1

## POWER REQUIREMENTS

### POWER CONSUMPTION

- Radio Shelf: 48V, 10A maximum
- Digital Shelf: 48V, 2.5A maximum

### MAXIMUM TX POWER

- +40dBm per antenna port for 3.84Mcps,
- +37dBm per antenna port for 7.68Mcps

## ENVIRONMENTAL

### HEAT EMISSION

- NB6411: 550W maximum
- NB6433: 1450W maximum

### HEAT FLOW

- Front to Back

### TEMPERATURE

- Operation at -20 to +55C

## PHYSICAL CHARACTERISTICS

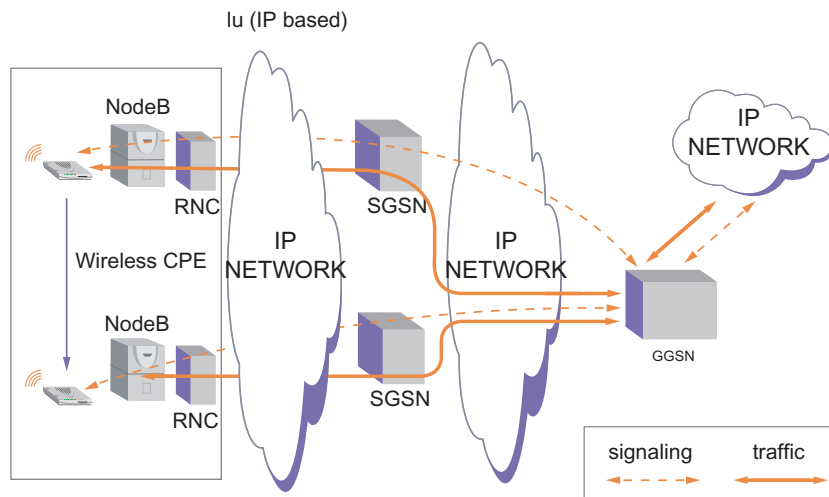
### SIZE (H X W X D)

- Radio Shelf: 222mm x 482.6mm x 320mm (8.9in x 19.3in x 12.8in)
- Digital Shelf: 177mm x 482.6mm x 320mm (7.1in x 19.3in x 12.8in)

### CHASSIS WEIGHT

- 45kgs/99lbs NB6411
- 95kgs/209lbs NB6433

## UTStarcom UMTS TDD (TD-CDMA) Network



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### About UTStarcom, Inc.

UTStarcom is a global leader in IP-based, end-to-end networking solutions and international service and support. The company sells its broadband, wireless, and handset solutions to operators in both emerging and established telecommunications markets around the world. UTStarcom enables its customers to rapidly deploy revenue-generating access services using their existing infrastructure, while providing a migration path to cost-efficient, end-to-end IP networks. Founded in 1991 and headquartered in Alameda, California, the company has research and design operations in the United States, China, Korea and India. UTStarcom is a FORTUNE 1000 company. For more information about UTStarcom, visit the company's Web site at [www.utstar.com](http://www.utstar.com)

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