



## > RELEASE PEOPLE FROM THEIR DESKS — AND LET COMMUNICATIONS GO WHERE THE WORK GOES

# NORTEL

### Product Brief

## Nortel Digital Mobility Solution for Norstar and Business Communications Manager

It's a surprising but very real statistic: 50 to 70 percent of office space is unoccupied during normal business hours, according to the International Telework Association and Council. Where are these people? Some are elsewhere in the building or visiting another company site. Others are working at home or on the road. With the widespread adoption of telecommuting, wireless and various other "virtual office" technologies, this trend will only increase.

How can companies ensure that time and distance do not become barriers to productive collaboration? What's the best way to provide connectivity for employees who are always on the move, such as healthcare professionals, plant supervisors and sales associates in large retail stores?

Wherever employees must stay in touch across a building or campus — with clear voice and a full set of telephony features — Nortel has a mobility solution to fit.

> Our Digital Mobility Solutions work seamlessly with Nortel Norstar Compact Integrated Communications System, Norstar Modular Integrated Communications System and Nortel Business Communications Manager 50, 200 and 400 platforms.

### Digital mobility made easy and affordable for 1 to 64 users

#### Blend wired and wireless worlds

Seamlessly extend the features and applications of Norstar and Business Communications Manager communications systems into the wireless realm. When your mobile users roam the premises, their services follow them on rugged, reliable wireless handsets. Messaging, contact center skillset routing, caller ID, conferencing... these features and more will work just the same as on users' desktops. In fact, users can switch between mobile and desktop phones during a call with a simple call transfer (from mobile to desktop or vice versa). Best of all, there are no airtime charges, because the system uses your own private segment of spectrum, which doesn't have to be registered with authorities.



### Build for scalability using a modular architecture

For small sites with up to eight mobile users, you can deploy a cost-effective Nortel Digital Mobility Controller 080 with wireless connections up to two base stations, each serving four handsets. You can link two controller modules together to double that capacity and serve 16 simultaneous users.

For medium-sized sites, the Nortel Digital Mobility Controller 320 supports up to eight base stations and 32 handset users. A Digital Mobility Controller 320 can be linked to a Digital Mobility Controller 080 or another Digital Mobility Controller 320 for even more capacity. With this modular architecture, your mobility solution can easily expand, up to 64 users, to meet future growth.

### Grow your coverage up to 1.5 million square feet

Each base station can serve up to 50,000 square feet (in a typical environment) and can be located up to 5,000 feet from the control module. A fully-configured Digital Mobility Controller 080 module provides coverage throughout 180,000 square feet of building space. A dual-module configuration covers nearly 1.5 million square feet — that's three football fields.

### Extend basestation coverage up to 50 percent

You can extend service beyond the reach of a base station or to obstructed areas using wireless repeaters — up to six repeaters per base station. Each locally powered repeater provides 25,000 square feet of coverage and extends support to either two or four simultaneous conversations.

An optional, external antenna can be used with a repeater to create isolated coverage zones up to a kilometer away (.62 miles) — ideal for providing mobile coverage on a campus with multiple buildings.

### Enjoy secure, clear conversations and continuous coverage

With this solution, there are no “dead zones”, no static or fading, so people may not realize you're talking on a portable phone. You won't have to worry about security and confidentiality. Users can be registered to the system with passwords; and with security features like Secure DES and frequency hopping, nobody can cut in on their service or accidentally tune into their conversations.

### Enjoy a rich set of features on rugged, reliable wireless handsets

Nortel offers a choice of stylish handsets designed for serious use, with sophisticated features such as three-line backlit

displays, programmable “softkeys”, memory for up to 80 names and numbers, support for caller ID, user-selectable ring tones and vibrate setting, adjustable volume, headset jack and more.

#### > The Nortel Digital Mobility

**Handset 7420** (available in North America only) is a highly featured handset ideal for the office environment.

#### > Nortel Digital Mobility Handsets

**7430** (equivalent model numbers for the 7430 outside North America are 7434, 4135 and 4136) offers a solid basic value at a low cost, with a rugged design ideal for industry, warehouse and retail environments that don't need special features like a headset jack, hands-free or vibrate-alert.

#### > The Nortel Digital Mobility

**Handset 7440** (equivalent model numbers for the 7440 outside North America are 7444, 4145 and 4146) is a full-featured, rugged, high-quality set with IP 54 classification, meaning it is well protected from dust and splashing water. The 7440 is designed for high traffic and/or more rugged environments, such as “big-box” retail stores, hospitals or even car dealerships, as well as power users in more dynamic office environments or customer contact centers.

## Digital Mobility – Designed for maximum scalability

Configuration	Base stations	Users	Simultaneous calls	Coverage (square feet)	Coverage (square meters)
DMC080	2	8	8	180,000	20,000
DMC080 plus DMC080	4	16	16	360,000	40,000
DMC320	8	32	32	720,000	80,000
DMC320 plus DMC080	10	40	40	900,000	100,000
DMC320 plus DMC320	16	64	64	1.5 million	160,000

## Nortel Digital Mobility Handsets: North America



Features		7420	7430	7440
Handset specific	Display	3x16	Graphic	Graphic
	Hands-free	No	No	Yes
	Vibrate alert	Yes	No	Yes
	Headset jack	Yes	No	Yes
	Multiple languages	3	11	11
	Rugged design	No	Yes	Yes
	IP 54 classification (dust and splashing water protected)	No	No	Yes
	Weight (grams)	121	130	130
	Size (mm)	143x48x26	148x50x28	148x50x28
Coverage (range – line of sight to base station)	Up to 1,150 ft/350 M*	Up to 1,000 ft/300 M*	Up to 1,000 ft/300 M*	
Common attributes	Norstar/BCM features	Comprehensive Norstar and BCM feature integration including Caller Identification (CLID), conferencing, voicemail and many more		
	Extensive battery life	Speech (10 hrs), Standby (100 hrs), Recharge (3.5 hrs)		
	Flexible sound settings	Including vibrate alert, silent mode, microphone mute, adjustable ringer volume, 9 different ring tones		
	Additional features	3 Soft Keys, CLID, Key Lock, Redial, Telephone Book (80 names/numbers), Frequency Hopping (to filter background noise and enhanced security)		
	Frequency/modulation/security/scalability	2.4GHz/GFSK/Secure DES/Up to 64 mobile users supported		
* Although the formal technical specifications for all Digital Mobility Handsets are 100 ft/300 M (line of sight to basestation), in certain environments the 7420 Handset has enjoyed a greater range (up to 15 percent further) due to different feature sets. As such, minor modifications to existing 7420-based configurations may be required when introducing the 7430/7440 handsets. Nortel recommends that all deployments include sufficient overlap to accommodate a mixed handset environment.				

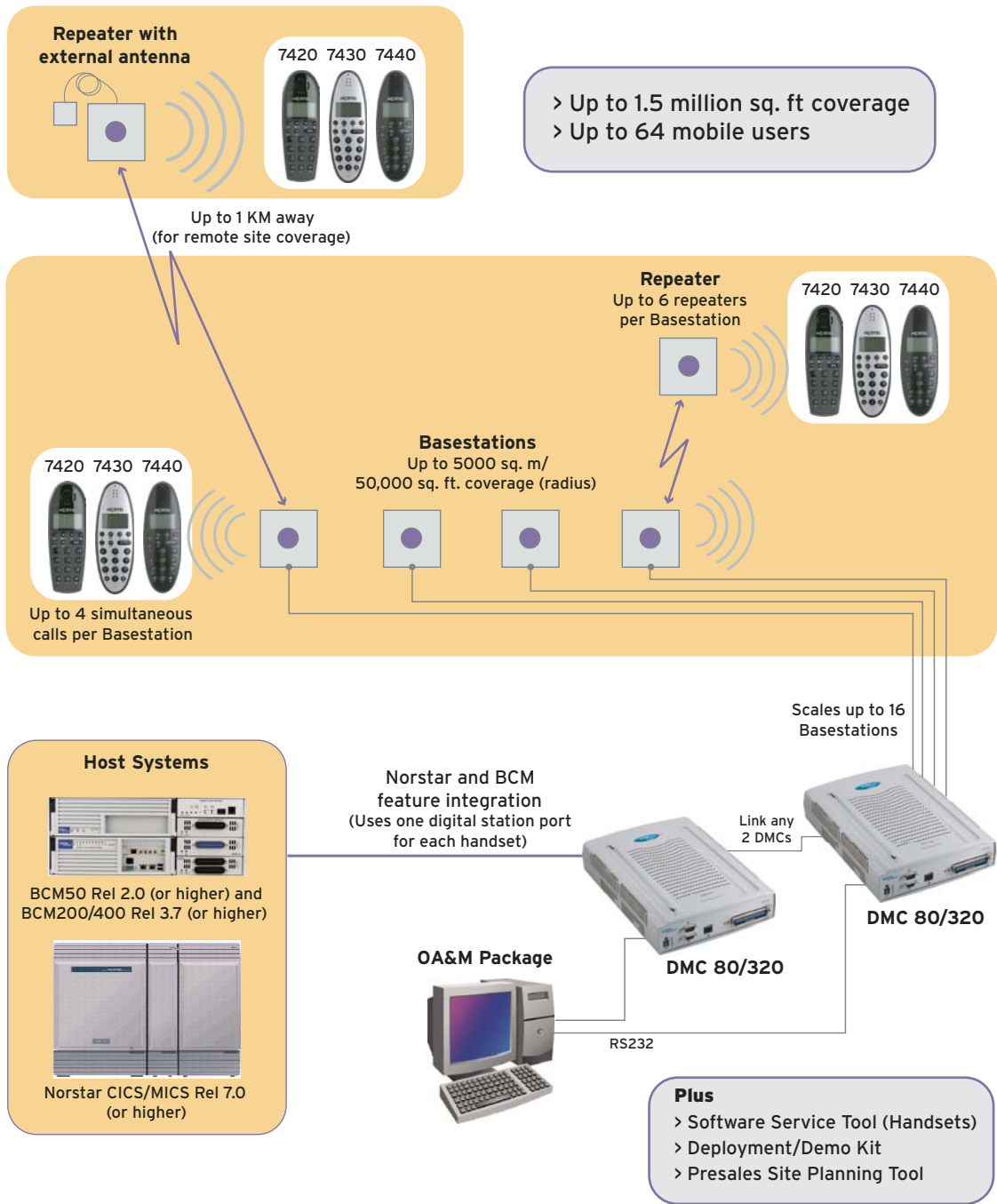
## Nortel Digital Mobility Handsets: Europe, Australia and South America

Features		4135, 4136 and 7434	4145, 4146 and 7444	4145Ex and 4146Ex
Handset specific	Display	Graphic	Graphic	Graphic
	Hands-free	No	Yes	Yes
	Vibrate alert	No	Yes	Yes
	Headset jack	No	No	Yes
	Multiple languages	11	11	11
	Rugged design (vibration tested)	Yes	Yes	Yes
	IP 54 classification (dust and splashing water protected)	No	Yes	Yes
	ATEX classification	No	No	Yes
Coverage and scalability	Up to 64 mobile users supported, range is up to 1000 ft/300 M (line of sight to Basestation)			
Common attributes	Norstar/BCM features	Comprehensive Norstar and BCM feature integration including Caller Identification (CLID), conferencing, voicemail and many more		
	Extensive battery life	Speech (16 hrs), Standby (150 hrs), Recharge (3.5 hrs)		
	Flexible sound settings	Including vibrate alert, silent mode, microphone mute, adjustable ringer volume, 9 different ring tones		
	Weight (grams) and size (mm)	130 grams, 148x50x28 millimeters		
	Additional features	3 Soft Keys, CLID, Key Lock, Redial, Telephone Book, Frequency Hopping (to filter background noise and enhanced security)		
Frequency/modulation/security	1.8GHz/DECT/Secure DES			

**Work all day without recharging batteries**  
 A fully charged battery can sustain up to 10 hours of talk time, 100 hours of standby time. That means these mobile

phones easily work a full day before they need to be recharged. Quick-charging docking stations even accelerate recharge time and use temperature-compensated charging to prolong battery service life.

**Figure 1. Nortel Digital Mobility**



## A few industry applications

### Retail

- “Always Mobile” workers
- Improve price accuracy/efficiency
- Increase employee productivity
- Improve customer service

### Hospitality and hotels

- Avoid cellular/pager charges
- Improve employee collaboration
- Room updates (vacant/clean/under repair)
- Increase productivity

### Manufacturing

- Collaboration/faster problem resolution
- Improve safety
- Improve inventory management
- Increase employee productivity

### Healthcare

- Improve patient care
- Improve safety
- Increase employee productivity
- Increase collaboration

### Rest easy with a 100-percent Nortel solution

One of the strongest advantages of Nortel Digital Mobility Solutions is that they are developed, marketed, serviced and supported by Nortel. You know you will benefit from leading quality, world-class service and support, and rock-solid compatibility with the core communications products and features.

### WLAN interference concerns — no worries here!

- › Digital Mobility has been designed with a high priority placed on co-existence with other services in the 2.4 GHz frequency band.
- › This includes, and especially focuses on, the wireless LAN 802.11b protocol.

## Global Digital Mobility Portfolio

Countries	Frequency	Supported products
Canada, U.S.	N/A	DMC080 DMC320
Global	N/A	DMC081 DMC321
Canada, U.S., China, Argentina	2401.280-2481.152 MHz (79 Channels)	Basestation 10 Repeater 20 Repeater 40 External Antenna 50 Handset 74x0
EMEA, Hong Kong, Australia, New Zealand, Taiwan	1880-1900 MHz	Basestation 15 (excluding Taiwan) Repeater 25 Repeater 45 External Antenna 51 Handset 41x5 Handset 41x6 (Australia, New Zealand)
South America	1900-1930 MHz	Basestation 14 Repeater 24 Repeater 44 External Antenna 51 Handset 74x4
Taiwan	1880-1885 MHz	Basestation 13

**For small applications, you could also use Norstar Business Series Terminal T7406 cordless phones with a Norstar or Business Communications Manager core platform. This economical option enables one to six users to roam up to 300 feet from a wall base, within 282,000 square feet of building space.**



Business Series Terminal T7406

As a result, on the rare occasion there is any overlap of Digital Mobility and WLAN channels, it is for such a short duration that any disruptions are easily accommodated without any significant impacts to either service.

To find out more about how Nortel Digital Mobility Solutions can redefine the way your workplace communicates, contact your local reseller or visit us on the Web at [www.nortel.com/digitalmobility](http://www.nortel.com/digitalmobility).

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Nortel is a recognized leader in delivering communications capabilities that enhance the human experience, ignite and power global commerce, and secure and protect the world's most critical information. Our next-generation technologies, for both service providers and enterprises, span access and core networks, support multimedia and business-critical applications, and help eliminate today's barriers to efficiency, speed and performance by simplifying networks and connecting people with information. Nortel does business in more than 150 countries. For more information, visit Nortel on the Web at [www.nortel.com](http://www.nortel.com).

For more information, contact your Nortel representative, or call 1-800-4 NORTEL or 1-800-466-7835 from anywhere in North America.

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