



Meridian 1 system specifications

communications options
for your growing needs

NORTEL
NETWORKS™

How the world shares ideas.



The perfect **fit** for any size **communications** need

Today's businesses are facing more competitive pressures than ever before. Every day, more people need to communicate more information across a constantly growing network. The Internet has redefined the workplace, creating the ability to share and act on information in real time, anywhere in the world. The more your business environment expands, the more you need to extend your capabilities to compete—and succeed. And the last thing that should hold you back is your communications system.

Meridian 1 delivers the performance, scalability, and flexibility you need to expand your communications system with the success of your business. Its layered, client-server architecture provides inherent flexibility and cost savings. Through the use of distinct functional layers—including processing, switching, access, and call control layers—incremental enhancements can be made without impacting the rest of the system. As a result, you can build on your existing investments and take advantage of new Meridian 1 technology and applications as your business grows.

Meridian 1 communications systems are available in a variety of configurations to meet the needs of all sizes and types of organizations. You can count on Meridian 1 to provide advanced voice features, data connectivity, LAN communications, CTI (computer telephony integration), and sophisticated information services for communication applications ranging from 20 to 16,000 users. Whether you choose the Meridian 1 Option 11C Mini, 11C, 51C, 61C, or 81C, you can be assured of getting the proven, digital switching performance and software-stored program control that have made the Meridian 1 an industry leader worldwide.

Option 11C Mini

The Meridian 1 Option 11C Mini is the ideal choice for a networked branch office supporting under 80 lines. The Mini has all the attributes of the Option 11C but in a smaller-chassis package. This chassis allows you to mount the Mini in a standard 19" rack along with other Nortel applications and data products. For larger networked sites, the Mini can

easily be expanded to multiple chassis with an upper limit of 700 lines. With the Mini's installation flexibility—and its breadth of Meridian 1 applications—the Mini is a formidable communication system extending all the power and benefits of a Meridian 1 network to smaller branch offices.

Option 11C

Meridian Option 11C is the optimal choice for stand-alone or networked sites from 30 to 700 lines. The Option 11C delivers advanced applications—including wireless capabilities, unified messaging, ISDN networking, and sophisticated call center capabilities—in a compact solution that's easy to install, maintain, and operate. With additional wall or 19" rack-mountable cabinets to help you minimize space requirements, the Option 11C provides the perfect fit for medium-sized offices.

Option 51C/61C/81C

Meridian Option 51C, 61C, and 81C systems provide you with the capability to support up to 16,000 lines. These systems are designed for flexibility and modularity so you can grow your business quickly and cost-effectively. Plus, Meridian 1 systems are engineered with Nortel Networks' industry-standard "Evergreen" migration path for hardware, software, applications, and system management. This means you can depend on your Nortel Networks Meridian 1 to meet your current and future business needs.

Meridian 1 communication systems also offer hundreds of software features and services, including basic and advanced voice and data communications, easy-to-use system administration tools, and an extensive array of call management, ISDN networking, and voice messaging features. This provides all Meridian 1 systems with a powerful platform for applications such as Meridian Mail voice processing, Unified Messaging with CallPilot, Meridian and Symposium Call Centers, Meridian Companion wireless communications, E911, Interactive Voice Response (IVR), and ISDN networking with PRI and BRI interfaces. Meridian 1 systems can easily be "IP-enabled" to take advantage of voice/data network integration by using line-side

and trunk-side Meridian Internet Gateways. These IP-optimized solutions leverage data network investments and preserve the reliability and feature-richness of Meridian 1. For added flexibility, you can choose from a large portfolio of software options—offered in a modular format—so you can tailor the system software to best serve your organization's requirements. These software options also provide management tools to help you allocate resources more cost-effectively while improving employee productivity.

Every Meridian 1 system delivers the open architecture and flexibility you need to optimize a solution for your unique requirements. Each system features high port density to minimize equipment, power, and floor space requirements. You can also configure software-programmable Universal Trunk Cards on site to support a variety of Central Office trunks such as CO, FX, Tie, DID, RAN, and Paging trunks. In addition, built-in diagnostic capabilities reduce costs and simplify system maintenance. They are available in stackable Universal Equipment Modules (UEMs), each containing a card cage assembly, I/O cabling, and your choice of AC or DC power supply. Plus, these self-contained UEMs can be stacked up to four high on a pedestal to form a column.

Whichever option you choose, you can count on Meridian 1 to deliver exceptional flexibility, open architecture, a wide range of software options, and the proven reliability that comes with Nortel Networks' over 100-year history of excellence and industry leadership. From education, finance, and health care to government and hospitality, organizations of all types and sizes are using the advanced capabilities of Meridian 1 communications systems to take their success to a higher level.

	Option 11C Mini	Option 11C	Option 51C	Option 61C	Option 81C
System Capacity	700 ports	700 ports	1,000 ports	2,000 ports	16,000 ports
CPU/Memory	68040 Call Processor	68040 Call Processor	68060E Call Processor	Redundant 68060E Call Processor	Redundant CP PII
	48 MB Flash	48 MB Flash	32 MB Flash	32 MB Flash	Flash not required
	16 MB DRAM	16 MB DRAM	48 MB DRAM	48 MB DRAM	128 MB DRAM
Mass Storage Media	Flash ROM integrated with CPU Software delivery via PCMCIA	System Core Card with optional storage on PCMCIA	IODUC (Input/Output Disk Unit with CD-ROM) with one 3.5" 1.44 MB floppy disk drive, one 128 MB hard disk drive, one CD-ROM	Redundant IODUC (Input/Output Disk Unit with CD-ROM) with one 3.5" 1.44 MB floppy disk drive, one 128 MB hard disk drive, one CD-ROM	Redundant Multi Media Disk Unit with one 3.5" 1.44 MB floppy disk drive, one 1.024 GB hard disk drive, one CD-ROM
I/O Ports	64	64	64	64	255
Switching Networks (Traffic CCS is at P.01 Grade of Service)	30 loops; 34,560 total CCS	30 loops; 34,560 total CCS	16 loops; 18,000 total CCS (or 14 loops; 15,000 total CCS [excluding service circuits])	32 loops; 36,000 total CCS (or 28 loops; 30,000 total CCS [excluding service circuits])	256 loops; 288,000 total CCS (or 224 loops; 240,000 total CCS [excluding service circuits])
Busy-Hour Call Completions	58000 BHCC Note: BHCC ratings are nominal only; actual capacity is dependent on software release, site configuration, and peripheral type.	58000 BHCC	135,00 BHCC	135,000 BHCC	320,000 BHCC
Integrated Data Switching Capacity	Up to 19.2 kbps asynchronous; Up to 64 kbps synchronous				
Trunking	Analog: Loop or Ground Start CO, FX, WATS, 2 or 4 wire E&M or 4 wire DX, DID, TIE, RAN, Paging, Meridian IP Gateway Digital: DTI, ISDN-PRI, ISDN-BRI, Meridian IP Gateway				
Telephone Compatibility	Meridian Digital Telephones: Analog Telephones:	Meridian M3901, M3902, M3903, M3904, M3905, M2006, M2008, M2008HE, M2616, M2216ACD, M2616CT, M2016S Secure Inca Telecommuter - i1010 Softphone - Meridian M9617 USB Phone M8000/M9000 series 500/2500 type			
Attendant Services Compatibility	Meridian 1 Attendant PC, Meridian M2250 Attendant Console, Central Answering Position (CAP)				
CallPilot	Can support CallPilot as a networked mode	IPE Version: 200 hours, 24 channels, 8,000 mailboxes with voice, fax, and desktop Tower and Rack: 1,000 hours, 96 channels, 20,000 mailboxes with voice, fax, and desktop			
Meridian Mail Capacity	Meridian Mail Mini: 200 hours, 12 channels, supported in slot 10 in expander chassis	48 ports, 400 hours of storage	96 ports, 800 hours of storage		
Symposium Call Center Server	Can be configured for up to 800 agents. Busy-hour capacity: 16,500 calls per hour (configuration dependent)				
Meridian MAX Capacity	MAX 9 IPE: 200 agents	MAX 9 IPEE: 300 agents			

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Symposium OPEN IVR	Virtually unlimited port size				
Meridian Link Connectivity	IBM Callpath, HP CCM, Genesys T-Server, Novell Netware Telephony Services (TSAPI), Symposium TAPI Service Provider for Meridian 1, Tandem Call Application Manager (CAM), Dialogic CT-Connect				
Meridian CCR Capacity	16,500 calls per hour (configuration dependent)				
Symposium Integrated IVR	48 ports, 400 hours Host protocols: 3270, 5250, VT-100, Ethernet and Token Ring		96 ports Host protocols: 3270, 5250, VT-100, Ethernet and Token Ring		
Input Voltage	AC: 180 to 280 V, 50/60 Hz	AC: 180 to 280 V 50/60 Hz DC: -42 to -54 V	AC: 180 to 280 V 50/60 Hz DC: -40 to -56.6 V		
Operating Environment	Ambient Temperature: - Recommended 15–30°C (59–86°F) - Absolute 0–45°C (32–113°F) Relative Humidity % Without Condensation: - Recommended 20%–55% - Absolute 10%–95%		Ambient Temperature: - Recommended 15–30°C (59–86°F) - Absolute 10–45°C (50–113°F) Relative Humidity % Without Condensation: - Recommended 20%–55% - Absolute 20%–80%, temperature change less than 10°C (50°F) per hour		
Power Consumption and Heat Dissipation	Mini Chassis: Power (watts): 200 Heat (BTU/hr): 680 Chassis Expander: Power (watts): 200 Heat (BTU/hr): 680	Main Cabinet: Power (watts): 500 Heat (BTU/hr): 1700 Expansion Cabinet: Power (watts): 500 Heat (BTU/hr): 1700	Module: Core/Network Module Network Module Intelligent Peripheral Equipment (IPE) Module Meridian Mail Module Application Equipment Module (single) Application Equipment Module (dual) InterGroup Module (IGM) Pedestal Power (watts) 360 270 460 240 140 190 0 50 Heat (BTU/hr) 1230 820 1160 820 480 650 0 170		
Dimensions and Weight	Main/Expander Chassis:	Main Cabinet/ Expansion Cabinet:	Pedestal/Module/Top Cap:		
Weight Empty	26 lb. (12 kg)	26 lb. (12 kg)	40 lb. (18.2 kg)/50 lb. (22.7 kg)/15 lb. (6.8 kg)		
Weight Full	32.2 lb. (14.6 kg)	70 lb. (31.7 kg)	70 lb. (31.8 kg)/130 lb. (59 kg)/ 15 lb. (6.8 kg)		
Width	17.3 in. (439 mm)	22 in. (55.9 cm)	32 in. (81.2 cm)/32 in. (81.2 cm)/32 in. (81.2 cm)		
Depth	12.8 in. (326 mm)	12 in. (30.5 cm)	26 in. (66 cm)/22 in. (55.9 cm)/22 in. (55.8 cm)		
Height	8.4 in. (214 mm)	25 in. (63.5 cm)	10 in. (25.4 cm)/17 in. (43.2 cm)/4 in. (10.1 cm)		
	Up to ten 19" rack/wall/desk-mountable chassis are allowed per system	Up to five wall-mountable cabinets or 1 cabinet, 8 chassis are allowable per system (1 cabinet = 2 chassis)	Up to four modules are allowed per column		



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