



Meridian 1

Communication Systems
for Your **Growing**
Needs

The Intelligent Solution for your business.



The Internet has redefined the workplace, creating the ability to share and act on information in real time, anywhere in the world. Every day, more people are communicating more information across a constantly growing network. The more your business environment expands, the more you need to extend your capabilities to compete—and succeed. The last thing you need is to be held back by your communications system. Nortel Networks Meridian 1* delivers flexible, scalable, reliable, and responsive performance to keep you moving; coupled with a rich suite of powerful features and tightly integrated applications.

With Meridian 1 systems, you're investing in flexibility! Meridian 1 systems enable you to tailor a solution to your unique requirements. For example, Meridian 1 Universal Trunk Cards, which support a variety of Central Office trunks, such as CO, FX, Tie, DID, RAN, and Paging, are software programmable. Each of the trunk card's eight ports is configurable for any of these capabilities. The programming of the card can be done on-site—just one example of how Nortel Networks Meridian 1 delivers flexibility while retaining cost-effectiveness through use of intelligent design.

With Meridian 1 systems, you have the flexibility to take advantage of the latest innovations in technology. With Meridian 1 Internet Telephony Gateways (ITG), you can "Internet Enable" your system to bring VoIP to your LAN, across your WAN or even to your mobile workforce! Meridian 1's architectural design, which includes processing, switching, access and call control layers, enables your business to invest in new technologies such as VoIP and do so incrementally. Without impacting investments you've made in the rest of your Meridian 1 system. So your business can enjoy all the benefits of VoIP while leveraging Meridian 1's "five nines" reliability, broad scalability, powerful performance and rich, robust feature set. It's VoIP—at a pace you're comfortable with.

Meridian 1 systems are also renowned for performance and reliability with over 25 years of evolutionary and revolutionary feature and applications development to

drive your business' profitability. That's over 3.7 million hours of telephony research and software design. X11 Release 25, Meridian 1's latest software release, supports over 450 features and services including:

- Basic and advanced voice and data communications applications such as ISDN Networking and VoIP
- State-of-the-art unified messaging and system administration applications
- An extensive array of call management applications for call centers with our Symposium portfolio

Our portfolio of server-based applications includes CallPilot* for Unified Messaging, Optivity* Telephony Manager (OTM) for GUI-based system management, and network administration and Symposium Call Center Servers for web-enabled call centers. CallPilot enhances the power and productivity of your desktop with the ability to manage your voicemail, email and fax mail via your own PC. In addition, CallPilot supports the greatest number of email interfaces in the industry!

Optivity Telephony Manager (OTM) brings simplified telephony network management to Meridian 1 systems. OTM supports browser-based administration that helps allocate resources more cost-effectively while improving your employee productivity. With the integration of Optivity Network Management Services (NMS), you can also manage your voice and data networks with the convenience of administration from one single platform.



Symposium* Call Center IP Solutions leverage Meridian 1's rich feature suite to bring skill-based routing across your network and web-enabled support for improved customer service and agent performance.

All our applications are designed to work smoothly and efficiently with Meridian 1. This integrated approach to applications means you get superior performance, inter-working, and support with the added value of "one-stop shopping"

Whether you choose Meridian 1 Option 11C Mini, 11C, 61C or 81C, you get reliable, powerful and flexible performance for your voice communications. With a variety of configuration options available to meet the needs of all sizes and types of organizations. Plus, with investment in Meridian 1 systems, you benefit from Nortel Networks' "Evergreen" philosophy. Engineered into our system design, Evergreen means that you can depend on Nortel Networks to provide a pathway to the latest in technological innovations, such as VoIP, for your system. It's this attention to flexibility, performance and cost-effective scalability that has made Meridian 1 the choice of over 43 million users worldwide.

Option 11C Mini

Meridian 1 Option 11C Mini is an excellent choice for a networked branch office and is optimized to support from 60 to 128 ports. Option 11C Mini has all the attributes of the Option 11C but in a smaller-chassis package. Option 11C Mini's chassis allows you to mount it in a standard 19" rack along with other Nortel Networks applications and data products. For customers with larger networked sites, the Option 11C Mini can easily be expanded to multiple chassis with an upper limit of 800 ports. With its installation flexibility and its breadth of Meridian 1 applications—Option 11C Mini is a formidable communication system extending all the power and benefits of a Meridian 1 network to small branch offices.

Option 11C

Meridian 1 Option 11C is the optimal choice for stand-alone or networked sites with expandability from 60 to 800 ports. Option 11C systems deliver advanced applications including e-Mobility, unified messaging, ISDN networking, and sophisticated call center capabilities with Symposium—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, Option 11C provides the perfect fit for medium-sized offices.

Options 61C and 81C

Meridian 1 Option 61C and 81C systems address the needs of medium to large-sized businesses by offering greater port scalability. Option 61C systems can support up to 2000 ports. Option 81C systems can support up to 16,000 ports. Both systems come standard with redundant core processing architectures for even greater system reliability. Option 61C and 81C systems are also designed with flexibility and modularity in mind. Software features are offered in modular format so that you can tailor system software to best serve your organization's requirements, cost-effectively and efficiently.

Whichever Meridian 1 system you choose, you can count on Meridian 1 to deliver exceptional flexibility, optimum performance, rich and robust feature sets with 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, hospitality, manufacturing and services industries - organizations of all types and sizes are using the advanced capabilities of Meridian 1 communications systems to power their profitability and success.

	Option 11C Mini	Option 11C	Option 61C	Option 81C
System Capacity	Optimized between 60 and 128 ports; Expandable up to 800 ports.	Expandable up to 800 ports	Expandable up to 2,000 Ports	Expandable up to 16,000 Ports
Memory	48 MB Flash; 16 MB DRAM	48 MB Flash; 16 MB DRAM	32 MB Flash 48 MB DRAM	Redundant CP PII Flash not required 128 MB DRAM, five network groups or less; 256 MB DRAM six network groups or greater
Call Processor	Motorola 68040	Motorola 68040	Redundant Motorola 68060E	Redundant CP PII
Mass Storage Media	Flash ROM integrated with CPU Software delivery via PCMCIA	System Core Card with Optional storage on PCMCIA	Redundant IODUC (Input/Output Disk Unit with CD-Rom) with one 3.5" 1.44 MB floppy disk drive: One 6GB hard drive with CD-ROM	Redundant Multi Media Disk Unit with one 3.5" 1.44 MB floppy disk drive; One 6GB hard disk drive with CD-ROM.
I/O Ports	64	64	64	255
Switching Networks (Traffic CCS is at P.01 Grade of Service)	50 Loops; 54,000 CCS	50 Loops; 54,000 CCS	32 loops; 36,000 total CCS (or 28 loops; 30,000 total CCS (excluding service units)	256 loops; 288,000 total CCS (or 224 loops; 240,000 total CCS (excluding service circuits)
Busy-Hour Call Completions	58000 BHCC (see note)	58000 BHCC (see note)	135,000 BHCC (see note)	320,000 BHCC (see note)
	Note: BHCC ratings are nominal only; actual capacity is dependent on software release, site configuration, and peripheral type.			
Integrated Data Switching Capacity	V.90 supported with up to 53 Kbps Asynchronous downstream and 33.6Kbps upstream using analog message waiting line card; 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 1 ITG Trunk Side Gateway 1.0 Digital: DTI, ISDN-PRI, ISDN-BRI, Meridian 1 ITG Trunk Side Gateway 2.1			
Telephone Compatibility	Meridian Digital Telephones: M3900 Series: M3901, M3902, M3903, M3904, M3905; M2000 Series: M2006, M2008, M2008HF, M2616, M2216ACD; M2016S Secure; IP adapter for Meridian Digital Telephones (M200 and M3900 series); i2004 Internet Telephone; i2050 Software Phone Analog Telephones: M8000/M9000 Series 500/2500 type			
Attendant Services Position	Meridian 1 Attendant PC; Meridian M2250 Attendant Console Multi-line Central Answering Compatibility (ML-CAP)			
Internet Telephone Compatibility	i2004 Internet Telephone (10/100 Base-T Auto Sensing; RJ-45 Connection); DHCP Compatible; Supports G.711, G.729A-Annex B Codecs. Internet Telephone Switch Module: IEEE 802.3, 802.3u, 802.3x standards supported. 10/100 Base-T Auto sensing, 48v DC Power Supply. i2050 Software Phone - Supported on Microsoft Windows (c) 98, Windows 2000			
e-mobility	e-mobility 802.11 Wireless IP Gateway for Meridian 1 - 24 ports; supports H.323 standard with Nortel Networks Extensions (+) for advanced telephony features; G.711 and G.729 Codecs.			
Meridian Integrated Applications	<p>Meridian Integrated Conference Bridge (MICB): Capacity per card - Up to 10 simultaneous 3-party conference calls, a conference with up to 32 participants or any combination thereof. 12 and 16 port configurations with X11 RLS 19 or later; 24, 32 and the dual card 42,50 and 62 port configurations supported with X11 RLS 22 and later. Supported on Option 11C Mini with X11 Release 24 and later. Ten languages supported. Netscape Communicator 4.01 or later browser and Microsoft Internet Explorer 4.5 or later are supported.</p> <p>Meridian Integrated Recorded Announcement (MIRAN): Small (5 channel), Medium (6 channel) and Large (10 Channel) configurations available supporting up to 20,36 or 40 concurrent calls per card. With RAN Broadcast software option, number of concurrent calls equals 136, 152 and 242 per MIRAN card, respectively. Eight minutes of voice or music memory standard; expandable up to 5 hours. Supported on X11 RLS 20 or later; RAN Broadcast option requires X11 RLS 23 or later. MIRAN supported on Option 11C Mini with X11 RLS 24 and later. Netscape Communicator 3.0 or later and Microsoft Internet Explorer 3.0 or later are supported.</p> <p>Meridian Integrated Personal Call Director (MIPCD): 8 port/50 user expandable to 100 users, 16 port/100 user expandable to 150 users, 24 port/150 user expandable to 200 users and 32 port/200 user expandable to 300 users are the configurations available. 8 and 16 port versions supported on X11 RLS 19 or later; 24 and 32 port configurations supported on X11 RLS 22 or later. MIPCD supported on Option 11C Mini with X11 Release 24 and later. Twelve languages supported. Netscape Communicator 4.01 or later and Microsoft Internet Explorer 4.5 or later are supported.</p> <p>Meridian Integrated Voice Services (MIVS): 2, 4 and 8 port configurations available. 2 port configuration supports up to 200 rooms; 4 port up to 500 rooms; 8 port up to 1000 rooms. Supported on X11 RLS 19 or later on 11C - 81C. RLS 24 or later for 11C Mini. Maximum of one MIVS card per Meridian 1 system. Netscape Communicator 4.01 or later and Microsoft Internet Explorer 4.5 or later are supported.</p> <p>Meridian Integrated Call Assistant (MICA): 5 to 32 port Configurations available. Up to 16 ports supported with X11 RLS 19 or later; Up to 32 ports supported on X11 RLS 22 or later. Supported on Option 11C Mini with X11 Release 24 and later. Netscape Communicator 4.01 or later and Microsoft Internet Explorer 4.5 or later are supported.</p> <p>MICA Flash Card Option - Maximum of 16 voice greetings and menus, 8 call screening tables, 1000 database name capacity, 14 predefined menus. American English supported.</p> <p>MICA Hard Drive Option - Maximum of 32 voice greetings and menus, 32 call screening tables, 10,000 database name capacity, 22 predefined menus, 3000 personal verification recordings. Eight languages supported.</p>			

	Option 11C Mini	Option 11C	Option 61C	Option 81C
Internet Telephony Gateways	Meridian 1 Internet Telephony Gateways (ITG). Meridian 1 ITG Trunk Side 2.1- 32 ports; supports ISDN Q.Sig and MCDN. Codecs supported include G.711, G729AB, G723.1. Signaling via H.323 version 2.0. Meridian 1 ITG Line Side 2.0 - 24 ports; Supports up to 96 i2004/i2050 phones per Gateway Card. Codecs supported include G.711, G.729B, G.729AB			
Symposium Call Center Server	Configurable up to 3000 agents with up to 1500 actively logged on (subject to capacity analysis). Busy-hour capacity: 16,500 calls per hour (configuration dependent)			
Symposium Express Call Center	SECCs can be configured for up to 300 agents with up to 150 actively logged on (subject to capacity analysis). Busy-hour capacity is 5,000 cph (configuration dependent).			
Meridian MAX Capacity	Up to 800 agent positions. Win 95,98,2000 and NT4.0 supported with RLS 10.			
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			
Periphonics Integrated Voice Response	<p>VPS/is: Configurable to 4 T1/E1 spans (96/120 ports) on a single system. With clustering, max capacity of VPSis systems is 15,000 ports. Actual VPS/is capacity realized is configuration dependent (i.e., dependent upon Meridian 1 system type and trunk ports available). Each IVR port equates to a trunk port off Meridian 1.</p> <p>Media Processing Series 100 (MPS); Configurable to 2 T1/E1 spans (48/60 ports) on a single system. Maximum capacity with clustering of (96/120) ports. Actual MPS 100 capacity realized is configuration dependent (i.e., dependent upon Meridian 1 system type and trunk ports available). Each IVR port equates to a trunk port off Meridian 1.</p>			
Network Management - Optivity Telephony Manager	Windows NT or 2000 server/professional; Web management support with Netscape Navigator 4.5 or MS Internet Explorer 5.x; HPOpenView and Optivity NMS integration; Supports up to 128,000 sets; Up to 2.5 million call records per costing configuration; Alarm queue can hold up to 1,360 traps (3.7 hours worth of alarms from Meridian 1)			
Input Voltage	AC: 110 to 240V, 50/60 Hz	AC: 180 to 280 V, 50/60 Hz DC: -42 to -54V	AC: 180 to 280V, 50/60 Hz; DC: -40 to -56.6V	AC: 180 to 280V, 50/60 Hz; DC: -40 to -56.6V
Operating Environment	Ambient Temperature: Recommended 15-30 degrees Celsius (59-86 degrees Fahrenheit) -Absolute 0-45 degrees Celsius (32-113 degrees Fahrenheit) Relative Humidity % Without Condensation: - Recommended 20%-55% - Absolute 10%-95%			
Power Consumption & Heat Dissipation	<p>Mini Chassis: Power (watts): 200 Heat (BTU/hr): 680</p> <p>Chassis Expander: Power (watts): 200 Heat (BTU/hr): 680</p>	<p>Main Cabinet: Power (watts): 500 Heat (BTU/hr): 1700</p> <p>Expansion Cabinet: Power (watts): 500 Heat (BTU/hr): 1700</p>	<p>Power (watts) Heat (BTU/hr)</p> <p>Core Network: 360 1230</p> <p>Network Module: 270 820</p> <p>Intelligent Peripheral Equipment Module: 460 1160</p> <p>Meridian Mail Module: 240 820</p> <p>Application Equipment Module (single): 140 480</p> <p>Application Equipment Module (dual): 190 650</p> <p>Intergroup Module: 0 0</p> <p>Pedestal: 50 170</p>	
Dimension & Weight	<p>Main/Expander Chassis: Weight empty: 26.4 lb. (12 kg) Weight full: 32.2 lb. (14.6kg) Width: 17.3 in (439 mm) Depth: 12.8 in (326 mm) Height: 12.8 in. (326 mm) 8.4 in (214 mm) Up to ten 19" rack/wall/ desk-mountable chassis are allowed per system</p>	<p>Main Cabinet/ Expansion Cabinet: Weight empty : 26 lb. (12 kg) Weight full: 70 ob. (31.7 kg) Width: 22 in. (55.9 cm) Depth: 12 in. (30.5 cm) Height: 25 in. (63.5 cm) Up to five wall-mountable cabinets or 1 cabinet, 8 chassis are allowable per system (1 cabinet = 2 chassis)</p>	<p>Pedestal/Module/Top Cap: Weight Empty: 40 lb. (18.2 kg)/50 lb. (22.7 kg)/15lb. (6.8 kg) Weight Full: 70 lb. (31.8 kg)/130 lb. (59 kg)/15 lb. (6.8 kg) Width: 32 in. (81.2 cm)/32 in. (81.2 cm)/32 in. (81.2 cm) Depth: 26 in. (66 cm)/22 in. (55.9 cm)/22 in. (55.8 cm) Height: 10 in. (25.4 cm)/17 in. (43.2 cm)/4 in. (10.1 cm)</p>	

Option 11C Mini

Option 11C

Remote Solutions

Remote Office 9150: Supports up to 32 ports per Remote Office Unit. Remote Office Unit includes: 10Base-T Ethernet Port, RS-232 Serial Port, Analog Port for Fax, Up to 4 U or S/T ISDN BRI Interface Trunk Modules; Reach Line Card Required - available in 16/32 port configurations. M3902, M3903, M3904, M3905 Digital Sets supported. M2008, M2616, M2216, M2616CT sets are supported. Minimum X11 Release with Option 11C Mini is X11 RLS 24.x. Codecs supported include G.711, G.726, G.729A; Group 3 and T.38 fax supported.

Remote Office 9110/9115: Codecs supported include G.711 and G.729A. xDSL and Cable Modem broadband residential services supported. 9110 supports M2008 with display, M2008 hands free with display, M2616 with display, M2216 with display. 9115 supports the above plus M3902, M3903, M3904 and M3905 sets. Minimum X11 RLS 24.x or later with Option 11C Mini.

Survivable IP Expansion: Supported over 100Base-T direct point-to-point or 100Base-F direct point-to-point. Up to 100m distance from Main Chassis for 100Base-T; Up to 2km from Main Chassis for 100Base-F. Third party converter - IMC Networks Ethernet Compatible Media Converter with a McLIM Tx/Fx-SM/Plus Module can support up to 40km between chassis' (wavelength 1300). Expands digital trunking support (DTI/PRI) up to a maximum of 15 cards. 100Base-Tx/F Layer 2 that supports full duplex and Layer 3 switching supported. Packet loss < .5%. Round Trip Delay <5msec with PDV jitter buffer set to maximum; PDV jitter buffer set to minimum, Round Trip Delay <12msec. Port Priority Queuing Recommended but not required. Support of VLAN configurations recommended but not required.

Line Side T-1/E-1 Interface: Extends 2500 set analog functionality up to 500 miles (800 km) from main Meridian 1 system; 24 channels per T-1; 30 channels per E-1.

Off Premise Station Analog Line Card: Extends 500/2500 set analog functionality up to 8 users; Distance up to 6 miles (8 - 10km) from main Meridian 1 system.

Meridian Home Office II - Supported by integrated 16 port Home Office II Line Card.; T1/E1 or PRI at Corporate Office. Requires remote access switch running IP and IPX protocols. ISDN BRI supported at residential site (Two 64kbps B-Channels can be aggregated for 128K or 512K with compression). M2616 and M2216ACD sets, M3900 RLS 1 and M3903/M3904 Release 2 sets supported with HMO II RLS 2.1.

Remote Office 9150 supports up to 32 ports per Remote Office Unit. Remote Office Unit includes: 10Base-T Ethernet Port, RS-232 Serial Port, Analog Port for Fax, Up to 4 U or S/T ISDN BRI Interface Trunk Modules; Reach Line Card Required - available in 16/32 port configurations. M3902, M3903, M3904, M3905 Digital Sets supported (requires X11 Release 24) independent of Remote Office release. M2008, M2616, M2216, M2616CT sets are supported with X11 RLS 17 or later on Remote Office RLS 1.2, X11 RLS 23 or later for Remote Office RLS 1.3. Codecs supported include G.711, G.726, G.729A; Group 3 and T.38 fax supported.

Remote Office 9110/9115 codecs supported include G.711 and G.729A. xDSL and Cable Modem broadband residential services supported. 9110 supports M2008 with display, M2008 hands free with display, M2616 with display, M2216 with display. 9115 supports the above plus M3902, M3903, M3904 and M3905 sets. Minimum X11 Release 23.x or later required with M2000 series digital sets, X11 RLS 24 or later required with M3900 series.

Survivable IP Expansion: Supported over 100Base-T direct point-to-point or 100Base-F direct point-to-point. Up to 100m distance from Main Cabinet for 100Base-T; Up to 2km from Main Cabinet for 100Base-F. Third party converter - IMC Networks Ethernet Compatible Media Converter with a McLIM Tx/Fx-SM/Plus Module can support up to 40km between cabinets' (wavelength 1300). Expands digital trunking support (DTI/PRI) up to a maximum of 45 cards. 100Base-Tx/F Layer 2 that supports full duplex and Layer 3 switching supported. Packet loss < .5%. Round Trip Delay <5msec with PDV jitter buffer set to maximum; PDV jitter buffer set to minimum, Round Trip Delay <12msec. Port Priority Queuing Recommended but not required. Support of VLAN configurations recommended but not required.

Mini - Carrier Remote: Capacity up to 128 stations per wall mounted cabinet; Supports up to 4,000 miles (6437km) from main Meridian 1 system; T-1 interface only; 22 channels per T-1; 1-2 T-1's supported per Local Mini Carrier Interface Card (LMI).

Line Side T-1/E-1 Interface: Extends 2500 set analog functionality up to 500 miles (800 km) from main Meridian 1 system; 24 channels per T-1; 30 channels per E-1.

Off Premise Station Analog Line Card: Extends 500/2500 set analog functionality up to 8 users; Distance up to 6 miles (8 - 10km) from main Meridian 1 system.

Meridian Home Office II - Supported by integrated 16 port Home Office II Line Card.; T1/E1 or PRI at Corporate Office. Requires remote access switch running IP and IPX protocols. ISDN BRI supported at residential site (Two 64kbps B-Channels can be aggregated for 128K or 512K with compression). M2616 and M2216ACD sets, M3900 RLS 1 and M3903/M3904 Release 2 sets supported with HMO II RLS 2.1.

Unified Messaging (CallPilot)

CallPilot 201i IPE - 200 hours, 10 Base-T (ELAN) and 10/100Base-T (TLAN) supported; 24 channels, Voice Prompt support in six languages; 3 language speech recognition. Up to 8000 mailboxes for voice, fax, desktop.

CallPilot 201i IPE - 200 hours, 10 Base-T (ELAN) and 10/100Base-T (TLAN) supported; 24 channels, Voice Prompt support in six languages; 3 language speech recognition. Up to 8000 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

Slim-line Card option: 2-12 ports expandable; 2-200 54 hours of storage; Meridian Mail R12 or R13 Software; Supported in Main cabinet or Slot 10 in Chassis expander. HVS features; Voice Forms; Call Center Integration; Advanced Networking

Card Option: 2-12 ports; 2 - 54 hours of storage; MM13; Supported in slot 10 of the main cabinet

OR

EC11: 4 - 48 Ports; 11 - 400 Hours of storage; MM13; Supported in it's own cabinet; HVS features; Voice Forms; Call Center Integration; Advanced Networking

Option 61C

Option 81C

Internet Telephony Gateways

Meridian 1 Internet Telephony Gateways (ITG).
 Meridian 1 ITG Trunk Side 2.1 - 32 ports; supports ISDN Q.Sig and MCDN. Codecs supported include G.711, G729AB, G723.1. Signaling via H.323 version 2.0.
 Meridian 1 ITG Line Side 2.0 - 24 ports; Supports up to 96 i2004/i2050 phones per Gateway Card. Codecs supported include G.711, G.729B, G.729AB, G.723.1.

Remote Solutions

Remote Office 9150:

Supports up to 32 ports per Remote Office Unit. Remote Office Unit includes: 10Base-T Ethernet Port, RS-232 Serial Port, Analog Port for Fax, Up to 4 U or S/T ISDN BRI Interface Trunk Modules; Reach Line Card Required - available in 16/32 port configurations. M3902, M3903, M3904, M3905 Digital Sets supported (requires X11 Release 24) independent of Remote Office release. M2008, M2616, M2216, M2616CT sets are supported with X11 RLS 17 or later on Remote Office RLS 1.2, X11 RLS 23 or later for Remote Office RLS 1.3. Codecs supported include G.711, G.726, G.729A; Group 3 and T.38 fax supported.

Remote Office 9110/9115: Codecs supported include G.711 and G.729A. xDSL and Cable Modem broadband residential services supported. 9110 supports M2008 with display, M2008 hands free with display, M2616 with display, M2216 with display. 9115 supports the above plus M3902, M3903, M3904 and M3905 sets. Minimum X11 Release 23.x or later required with M2000 series digital sets, X11 RLS 24 or later required with M3900 series.

Fiber Remote: Capacity up to 256 stations at remote site; Available in Wall Mount and Floor Standing IPE. Supported on dark single mode fiber (8-9 micron) up to 22 miles (35km) or multi-mode fiber (50 and 62.5 micron) up to 7 miles (11km) from main Meridian 1; X11 RLS 19 or later or International X11 RLS 18.30H or later.

Fiber Remote Multi-IPE: Capacity up to 512 stations with 1-2 superloop interface and 1,204 stations with 1-4 superloop interface; Supported on dark single mode fiber (8-9 micron) up to 25 miles (40km) or dark multi-mode fiber (62.5 micron) up to 5 miles (8km) from main Meridian 1; X11 Release 19 or later or International X11 Release 18.30H or later.

Mini - Carrier Remote: Capacity up to 128 stations per wall mounted cabinet; Supports up to 4,000 miles (6437km) from main Meridian 1 system; T-1 interface only; 22 channels per T-1; 1-2 T-1's supported per Local Mini Carrier Interface Card (LMI); Support for fractional T-1; X11 Release 17 or later.

Carrier Remote: Up to 256 stations supported per Local Carrier Interface (LCI) card; Supports up to 4,000 miles (6437km) from main Meridian 1 system, T-1 and E-1 interfaces; 21 channels per T-1 and 27 channels per E-1 available; Up to 3 T-1/E-1 links supported per LCI card; X11 RLS 21 or later with Carrier Remote Software Option required.

Line Side T-1/E-1 Interface: Extends 2500 set analog functionality up to 500 miles (800 km) from main Meridian 1 system; 24 channels per T-1; 30 channels per E-1; Supported on X11 RLS 17 or later, International X11 Release 18.30H or later, X11 RLS 21 or later for SAL.

Off Premise Station Analog Line Card: Extends 500/2500 set analog functionality up to 8 users; Distance up to 6 miles (8 - 10km) from main Meridian 1 system; Supported with X11 RLS 20 or later, X11 RLS 21 for SAL.

Meridian Home Office II - Supported by integrated 16 port Home Office II Line Card.; T1/E1 or PRI at Corporate Office. Requires remote access switch running IP and IPX protocols. ISDN BRI supported at residential site (Two 64kbps B-Channels can be aggregated for 128K or 512K with compression). M2616 and M2216ACD sets, M3900 RLS 1 and M3903/M3904 Release 2 sets supported with HMO II RLS 2.1. Minimum X11 RLS 17 with M2616, M2216ACD. Minimum X11 RLS 24 with M3900 series.

Unified Messaging (CallPilot)

CallPilot 201i IPE - 200 hours, 10 Base-T (ELAN) and 10/100Base-T (TLAN) supported; 24 channels, Voice Prompt support in six languages; 3 language speech recognition. Up to 8000 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

EC: 4 - 96 Ports; 11 - 800 Hours of storage, HVS features; Voice Forms; Call Center Integration; Advanced Networking

Periphonics Integrated Voice Response

VPS/is: Configurable to 4 T1/E1 spans (96/120 ports) on a single system. With clustering, max capacity of VPSis systems is 15,000 ports. Actual VPS/is capacity realized is configuration dependent (i.e., dependent upon Meridian 1 system type and trunk ports available.). Each IVR port equates to a trunk port off Meridian 1.
 Media Processing Series 100 (MPS); Configurable to 2 T1/E1 spans (48/60 ports) on a single system. Maximum capacity with clustering of (96/120) ports. Actual MPS 100 capacity realized is configuration dependent (i.e., dependent upon Meridian 1 system type and trunk ports available). Each IVR port equates to a trunk port off Meridian 1.
Media Processing Series 1000 - Configurable from 4 T1/E1 spans (96/120 ports) to 64 T1/E1 spans (1,536/1,920) ports in a single cabinet. Multiple cabinets can be networked together to increase capacity to 384 T1/E1 spans (9,216/11,520) ports in a cluster. Up to 10 clusters can be engineered for a maximum capacity of 3840 T1/E1 spans (92,160/115,200ports). Actual MPS 1000 capacity realized is configuration dependent (i.e., dependent upon Meridian 1 system type and trunk ports available). Each IVR port equates to a trunk port off Meridian 1.



For more information, please contact your local Nortel Networks account representative or call 1-800-4 NORTEL (1-800-466-7835) or 1-506-674-5470.

Nortel Networks Corporation
8200 Dixie Road, Brampton, Ontario, L6T 5P6, Canada

www.nortelnetworks.com

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Meridian 1 Option 11C Mini



Bring the
full power
of your Meridian 1 to your
small branch office.

NORTEL
NETWORKS™

How the world shares ideas.

Your small branch offices can now get all the power, capabilities, and features of your Meridian 1* in a new PBX system, the Meridian 1 Option 11C Mini.

further flexibility. Mini has the same Internet capability as the larger Meridian 1 PBXs, so your branch office can take advantage of current and future Meridian IP applications and products.

Best of all, the Option 11C Mini can be installed almost anywhere with ease. It can be rack, wall, table, or shelf mounted in minutes. And while the Mini can grow to an impressive 700 lines, if your office should outgrow it and you upgrade to a

Meridian Integrated Conference Bridge (MICB) and Meridian Integrated Recorded Announcements (MIRAN). With the MICB, employees can set up teleconferences of up to 62 participants; and with MIRAN, any size office can offer callers sophisticated recorded product and other announcements 24 hours a day.

Since the Mini uses the same desktop features and administration as larger Meridian systems, it can be fully

The Meridian 1

A small branch office networking solution that's

Option 11C Mini

Specially designed for small branch offices and remote sites, this small powerhouse of a PBX can function as a standalone unit or as an end node in a Meridian 1 network. When networked with your larger Meridian 1 switch, such as an Option 51, 61C, or 81C, the Option 11C Mini accesses the main Meridian 1's centralized services like Meridian Mail and Symposium* to deliver everything your branch office needs to do business.

The Mini is perfect for the 20- to 80-line branch office. It supports the same lines, trunks, and software applications as its larger sibling, the proven Meridian 1 Option 11C, plus, it supports the full portfolio of Meridian desktop telephones. Yet this pint-sized PBX costs less and does more than anything in its class on the market today.

The Option 11C Mini can be networked over your Nortel Networks system with a traditional T1 link, and it supports fiber remotes to provide even

larger Meridian 1 system, you can easily re-use the Mini capabilities for added capacity within your enterprise. The choice is yours.

All the capabilities of Meridian 1 in a very small package.

Big things really do come in small packages! Imagine getting all the features of your Meridian 1 switch from a unit about the size of your office fax machine.

Here's how: The Option 11C Mini supports all Meridian 1 networking protocols, letting you take advantage of the full range of integrated Meridian 1 applications, including Meridian Mail, Symposium Call Center, Symposium IVR and Directory Service, Symposium desktop applications, and Meridian mobility solutions, plus a host of IP applications.

With the Mini, your small branch office will be able to offer callers such sophisticated business applications as the

integrated into your Meridian 1 voice mail and easily administered from your central location. Mini also supports Meridian Administration Tools and Meridian Configurator.

And not only is the Option 11C Mini competitively priced, it's also easy to install. You can put it just about anywhere: on the wall (horizontally or vertically), a table, a shelf, or a standard 19-inch rack mount. The rack mount lets you place the Mini in the same racks used for Passport, Symposium, or other data products that would reside in a 19-inch rack mount unit. When it comes to delivering the goods, the Option 11C Mini is a king-sized idea in a smart, little package.

Mini Cost, Maxi Power.

If your branch office needs fewer than 80 lines, you'll find that the Option 11C Mini gives you impressive power at a cost that's significantly less than the larger Option 11C. Then compare it to the

competition: You'll find that the Mini offers unsurpassed features, power, and value for its class.

When your branch office branches out, the Mini grows with you.

As your business grows, your branch offices will, too. So it's comforting to know that while the Option 11C Mini is specially designed for the 20-

The Mini System Controller (MSC) card has proven technology from the Option 11C Small System Controller (SSC); it has X11 software pre-programmed directly onto the MSC, and it supports up to 10 logical slots—the equivalent of two chassis. If you want to expand beyond two chassis, just replace the MSC with an SSC and connect the multiple chassis with fiber.

The Option 11C Mini's creative

business, they'll get the same professional response, reliable communications, and polished corporate image, regardless of their call's final destination. The bottom line? Your business communications are consistent and indiscernible from one location to another, and your employees look and feel more effective—because they are.

As a Meridian 1 Internet Enabled system, the Option 11C Mini gives your small branch office and remote employees



easy on the budget—and powerful on capabilities.

80-line range, it has the flexibility to grow to 700 lines.

To fully appreciate the sheer muscle of this small-scale PBX, take a close look at the design. The Mini is packaged in a main chassis that houses its own power supply, plus the Mini System Controller (MSC), a 48-Port digital line card, and slots for three additional IPE packs. It can accommodate up to three PRI packs. This is an elegantly economical solution for small sites needing up to 80 lines.

Unique to the Mini, the 48-port digital line card supports 48 voice ports and 48 data ports. With the availability of the 48 digital ports, you can take full advantage of voice and data capability from your Meridian 1 telsets using the Meridian Communications Adapter and/or the Analog Terminal Adapter. The Mini also supports all Meridian telephone sets, including the M2000 series phones, the M3900 series phones, and the M2250 Attendant Console.

chassis design lets you grow your system in four-slot increments. Its main chassis offers four slots linked by two copper cables to a Chassis Expander, which provides an additional four slots. Want to expand even further? No problem. You can add up to four main chassis and four Chassis Expanders for a total capacity of up to 700 lines. And should you need to expand to a larger Meridian 1, your chassis becomes part of your larger system. It's all part of Nortel Networks' "Evergreen" strategy, our commitment to offer a clear upgrade path that lets you grow your Option 11C Mini system along with your business.

Get Totally Wired. It's Good for Business.

With the Mini, it makes no difference whether your employees work in your central office, a satellite location, or whether they're home-based. They'll all have access to the same seamless applications and features. When customers call your

the full range of Meridian IP applications and products, including the Meridian IP Telecommuter, the Meridian Integrated Telephony Gateway, Remote Office, and Home Office II.

With these applications, remote workers can get integrated voice and data, LAN-speed data access, plus fax and voice mail at the office or when working from home. All the bells, all the whistles.

Future-Proof Your Branch Office

With the Option 11C Mini, your branch office can handle the future with confidence. That's because the Mini was engineered from proven Option 11C technology and takes advantage of the same software enhancements that become available with the Option 11C.

In fact, the Option 11C Mini uses the same Meridian 1 X11 software packages as the Option 11C, General Business, Enhanced Business, Enterprise Business, and Network Attendant Services/Virtual

Network Services. The Mini comes with 100 initial terminal lines and can be grown in increments of 100. Software upgrades and system expansions for the Mini are available in minutes via keycode from the Option 11C Internet software download site. This site lets you change or include software option packages, ISM parameter upgrade packages, and feature set upgrade packages.

And with the Mini's Internet Enabled options, you can use the Meridian Internet Telephony Gateway for IP trunks and lines, allowing you to easily migrate your existing telephony network toward the unified voice and data network of the future.

What the Mini gives you that the competition doesn't.

Go ahead. Compare the Option 11C Mini to any other product in its class on the market. You'll quickly see it's the leading solution for your under 80-line size branch office. Look closely, compare carefully, and you'll find that the Mini gives you the following critical capabilities that the competition often lacks.

- **A Clear Migration Path** — While the Mini can grow to 700 lines, its migration capabilities don't stop there. Designed along with the Option 11C, the Mini protects your investment with an economical and technologically graceful migration path. And if you do outgrow your Mini, it's re-usable in another office. And because of its small size and variety of options for installing, it's also easy on your budget to move it from one location to another.
- **Fiber Remote** — The Option 11C Mini offers fiber remote capabilities.
- **Scalability to 700 Lines** — From 20 to 700 users. Now that's scalability. While the Mini is especially designed for the 20- to 80-line range, it can grow as fast as you do.
- **Centralized Voice Mail** — It's important for every part of your company to speak with the same voice. With centralized voice mail, you can offer your customers the same premier quality voice mail— no matter what office they call.

Local or Global, We're Here For You

Whether you have a single branch office or hundreds of branches around the world, the Option 11C Mini will put all the power, flexibility, and value of your Meridian 1 network to work for you. The Mini is available in 180 countries around the world.

For more information about the genius of networking with the Meridian 1 Option 11C Mini, contact your authorized Nortel Networks Meridian 1 distributor or call 1-800-4NORTEL. And visit our website at www.nortelnetworks.com.



How the world shares ideas.

In the United States:

Nortel Networks
4401 Great America Parkway
Santa Clara, CA 95054
1-800-4NORTEL

In Canada

Nortel Networks
8200 Dixie Road
Brampton, Ontario
L6T 5P6, Canada

In the Caribbean and Latin America:

Nortel Networks
1500 Concord Terrace
Sunrise, Florida 33323-2815 USA
954-851-8000

In Europe, the Middle East and Africa:

Nortel Networks
Les Cyclades - Immeuble Naxos
25 Allée Pierre Ziller
06560 Valbonne France
33-4-92-96-69-66

In the Asia Pacific

Nortel Networks
151 Lorong Chuan
#02-01 New Tech Park
Singapore 556741
65-287-2877

<http://www.nortelnetworks.com>