

Avaya Business Communications Manager 450 (BCM450) Technical Specifications

Base unit	
Physical dimensions	
Depth	18.3 in.; 46.5 cm
Width	17.5 in.; 44.5 cm
Height	7.1 in.; 18.0 cm
Weight	Standard power supply: 14.18 kg; 31.25 lbs Redundant power supply: 18.24 kg; 40.20 lbs

Base unit Components	
Media Bay Modules	Up to four
CPU Processor	Freescle (1.3GHz core)
Memory (RAM)	512MB DDR2 SDRAM
Hard Drive	80GB SATA
DSP	3 TI 600MHz DSPs
Capacity Expansion Card (optional)	Expansion Daughter Card with 4 TI 600MHz DSPs

System status and LEDs	
Power on self-test with LED feedback	
Two System Status LEDs (Power and Status)	
Three hard drive activity LEDs (HDD1, HDD2, RAID) (RAID LED not supported on BCM450 Rls. 1)	
Reset button	
Platform Status Monitor monitors CPU load, memory load, HDD space, temperature, fans, power, network throughput	
BCM Monitor monitors overall system status, IP telephony functions, utilization of resources, operation of telephony applications and status of PRI, BRI and IP trunks	

Mounting options	
Rack-mount (standard 19-inch rack, pre-installed); Stand-alone (feet included); Wallmount (optional)	

Power supply specifications	
Standard power supply	Redundant power supply (field install only)
Auto-sensing	Auto-sensing
300 Watts	350 Watts
90/264	VAC 90/264 VAC
6.0 A/3.0 A	7.0 A/3.5 A
60/50 Hz	60/50 Hz

Environmental specifications	
Operating temperature	32° to 104°F; 0° to 40°C
Operating humidity	10% to 90% relative humidity, non-condensing
Storage temperature	-67° to 158°F; -55° to 70°C
Storage humidity	Up to 95% relative humidity

Mechanical requirements	
NEBS (GR-63-CORE) compliant for Transportation and Operational Vibration per IEC 68-2-27, Package Drop Shock resistance per IEC 68-2-32, Transportation Bounce to IEC 68-2-55 and Unpackaged Drop to ISTA Project 2A	



Regulatory compliance

Electromagnetic emissions

Radiated Air	Australia / NZ CISPR22 Class A North America FC Part 15 & CISPR22 Class A EU / International EN55022 Class A
Conducted Power Leads	Australia / NZ CISPR22 Class A North America FC Part 15 & CISPR22 Class A EU / International EN55022 Class A

Immunity (ESD, RF Radiated, EFT, Surge, RF Conducted, and Dips / Short Interrupts)

Radiated	North America customer driven EU / International EN55024
Conducted	North America customer driven EU / International EN55024
Harmonics and Flickers	EN 61000-3-2 and EN 61000-3-3

Network protection

Australia TS038/31/03/04/01
EU CTR12/13/3/4/21
North America/CALA FCC Part 68, CS 03 Issue 8

Safety and surge/transient

Australia TS038/31/02/03/04, ACA TS001, AS/NZS 3260
NA/CALA/APAC IEC/EN 60950-1 (including all group and national deviations) and CSA C22.2 No. 60950-1, UL60950-1

Remote Access for Management Applications

Embedded Soft Modem v.34 for dial in and dial out
ISDN BRI / PRI (single B-Channel) for dial in or dial out

Media Bay Modules

16 Station Digital Station Media Bay Module+ (DSM 16+)

One Amphenol (male) connector (25 pair)
Individual interfaces are current connector (25-pair); limited to 80 mA
16 digital phone ports
Two LEDs: Power, Status
Utilizes 1/2 DS-30 (with DIP switch set appropriately)

32 Station Digital Station Media Bay Module+ (DSM 32+)

Two Amphenol (male)
Individual interfaces are current connectors (25 pair); limited to 80 mA
32 digital phone ports
Two LEDs: Power, Status
Utilizes 1 DS-30 (with DIP switch set appropriately)

8 Station Analog Station Media Bay Module (GASM 8)

One Amphenol (male) connector (25 pair)
Maximum modem connection speed: 28.8 kbps
8 analog phone ports
Loop length 26G 2600 ft, 24G 4000 ft; 22G 6500 ft
Disconnect Supervision-850 ms. Momentary Disconnect (Open Switch Interval (OSI) as per TIA/EIA 464)
Two LEDs: Power, Status
Utilizes 1/4 DS-30 (with DIP switch set appropriately)
* Note: Please refer to the engineering documentation for regional availability and signalling standards.

Digital Trunk Media Bay Module (DTM)

One 8-pin RJ-45C modular jack
T1 trunk interface with integrated CSU
24 B channels with T1 interface (supports DSX-1 and DS1 interfaces)
23 B channels with North American PRI interface
LEDs: Power, Status, In-service, Loop-back, Test, Receive Alarm, Receive Error, Transmit Alarm, Transmit Error
30 digital channels with ETSI PRI Interface
Utilizes 1 (one) DS-30

Basic Rate Interface Media Bay Module (BRIM S/T)
Four modular RJ-45 jacks
Supports four S/T interfaces (8 B-channels)
T-interface to connect to an NT1 device or an S-interface to connect ISDN terminals
Supports ETSI and National ISDN BRI
Two LEDs: Power, Status
Utilizes 1/3 DS-30
Global Analog Trunk Module (GATM 4)
One Amphenol (male) connector (25 pair)
Four loop start CLASS/CMS lines plus one auxiliary port for V.90 modem, fax, analog telephone connection or Power Fail Transfer
Two LEDs: Power, Status
Utilizes 1/4 DS-30
* Note: Please refer to the engineering documentation for regional availability and signalling standards.
Global Analog Trunk Module (GATM 8)
One Amphenol (male) connector (25 pair)
Eight loop start CLASS/CMS lines plus one auxiliary port for V.90 modem, fax, analog telephone connection or Power Fail Transfer
Two LEDs: Power, Status
Utilizes 1/2 DS-30
* Note: Please refer to the engineering documentation for regional availability and signalling standards.
Fiber Expansion Media Bay Module (FEM)
Six fiber ports
Two LEDs: Power, Status

Global 4X16 Module (4 Caller ID trunks + 16 Station sets, G4x16)
One Amphenol (male) connector (25 pair) to support four loop start CLASS/CMS lines plus one auxiliary port for V.90 modem, fax, analog telephone connection, or Power Fail Transfer
One Amphenol (male) connector (25 pair) to support 16 digital phone ports
Individual Station interfaces are current limited to 80mA
Two LEDs: Power, Status
Utilizes 1 1/4 DS-30s
* Note: Please refer to the engineering documentation for regional availability and signalling standards.
Global 8X16 Module (8 Caller ID trunks + 16 Station Sets, G8X16)
One Amphenol (male) connector (25 pair) to support eight loop start CLASS/CMS lines plus one auxiliary port for V.90 modem, fax, analog telephone connection or Power Fair Transfer
One Amphenol (male) connector (25 pair) to support 16 digital phone ports
Individual Station interfaces are current limited to 80mA
Two LEDs: Power, Status
Utilizes 1 1/2 DS-30s
* Note: Please refer to the engineering documentation for regional availability and signalling standards
ADID Module (Analog Direct Inward Dial 4-Port or 8-Port, ADID4 and ADID8)
One Amphenol (male) connector (25 pair) to support four or eight ADID lines
Two LEDs: Power, Status
Utilizes 1/4 DS-30 (ADID4) or 1/2 DS-30 (ADID8)
Supports North American DID standard and is only available in NA, CALA and GC (Hong Kong)



Expansion Cabinet
Connections
Six Media Bay Module slots
An 8-pin modular DS256 connector for the interface to the Business Communications Manager base unit (5 meter cable); supporting 8 DS-30 buses

Standard Expansion Cabinet	
Depth	18.3 in.; 46.5 cm
Width	17.5 in.; 44.5 cm
Height	5.4 in.; 13.6 cm
Expansion Cabinet with no Media Bay Modules 24.75 lb.; 11.25 kg	
Expansion Cabinet with six Media Bay Modules 39 lb.; 17.75 kg	
Redundant Expansion Cabinet (redundant power supply and fans)	
Depth	20 in.; 53.8 cm
Width	17.6 in.; 44.6 cm
Height	5.4 in.; 13.6 cm
Expansion Cabinet with no Media Bay Modules 31.9 lb.; 14.5 kg	
Expansion Cabinet with 6 Media Bay Modules 46.2 lb.; 21 kg	
Power requirements	
Standard Power Supply	Redundant Power Supply
Auto-sensing	Auto-sensing
300 Watts	350 Watts
90/264 VAC	90/264 VAC
6.0 A/3.0 A	7.0 A/3.5 A
60/50 Hz	60/50 Hz

Environmental ranges	
Operating temperature 32° to 104°F; 0° to 40°C	
Operating humidity 10% to 90% relative humidity, non-condensing	
Storage temperature -67° to 158°F; -55° to 70°C	
Storage humidity Up to 95% relative humidity	
Mounting options	
Rack-mount (standard 19-inch rack); Stand-alone (feet included)	
Wall-mount (optional wall-mount bracket available separately)	

Telephones and Adapters			
Digital Deskphones			
7000 Series Digital Deskphones			
	Dimensions (Inches)	Loop Length (26G)	With SAPS sets
T7000*	7.3D x 5.5Wx3.5H	1,000 ft.	2,600 ft.
T7100	8.1D x 7Wx3.5H	1,000 ft.	2,600 ft.
T7208	8.1D x 7.7Wx3.5H	1,000 ft.	2,600 ft.
T7316E	8.1D x 10.3Wx3.5H	1,000 ft.	2,600 ft.
T24 KIM	7.7D x 3.6Wx3.4H	Connects to T7316E	
NACU**	12.5 x 12Wx2H	1,000 ft.	2,600 ft.
* Not available in NA			
** Available only in NA, CALA and GC (Hong Kong)			
T24 Kim—requires T7316E			
T24 EKIM (Enhanced KIM — used as CAP) — max. 12 positions per system; max 4 EKIMs per position			
T24 OKIM (Ordinary KIM — used for answer/DSS/BLF) — unlimited per system; max 4 OKIMs without power supply per position; max 9 OKIMs with power supply per position			
IP Deskphones			
1110E IP Deskphone			
1120E IP Deskphone			
1140E IP Deskphone			
1210 IP Deskphone			
1220 IP Deskphone			
1230 IP Deskphone			
2001 IP Deskphone			
2002 IP Deskphone			
2004 IP Deskphone			
2007 IP Deskphone			
2033 IP Deskphone			
2050 IP Softphone			

Expansion Modules for IP Phones
Key Expansion Module 2000 Series IP Deskphones
Key Expansion Module 1100 Series IP Deskphones – 18 Key
Key Expansion Module 1200 Series IP Deskphones – Display 12 Keys
Key Expansion Module 1200 Series IP Deskphones – Paper 18 Key
WLAN
WLAN Handset 2210
WLAN Handset 2211
WLAN Handset 2212
WLAN Handset 6120
WLAN Handset 6140
WLAN IP Telephony Manager 2245
WLAN Applications Gateway 2246
Mobile Voice Client 2050
Digital Mobility
Digital Mobility Controller
Digital Mobility Base Station
Digital Mobility Repeater
Digital Mobility Handsets 7420, 743x, 744x, 413x, 414x

Mobility – Cordless
7406E Digital Mobile Handset: up to 8 user per system – available in NA, Mexico and Caribbean countries (except for Jamaica and Trinidad) only
Accessories
BST Doorphone
Station Auxiliary Power Supply (SAPS)
ATA-2 Analog Terminal Adapter (separate models for NA, Europe and Australia)





In the United States:

35 Davis Drive
Research Triangle Park,
NC 27709 USA

In Canada:

195 The West Mall
Toronto, Ontario M9C
5K1 Canada

**In Caribbean and
Latin America:**

1500 Concorde Terrace
Sunrise, FL 33323 USA

In Europe:

Maidenhead Office Park
Westacott Way,
Maidenhead Berkshire
SL6 3QH UK

In Asia:

United Square
101 Thomson Road
Singapore 307591
Phone: (65) 6287 2877

About Avaya

Avaya is a global leader in enterprise communications systems. The company provides unified communications, contact centers, and related services directly and through its channel partners to leading businesses and organizations around the world. Enterprises of all sizes depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, customer service and competitiveness. For more information please visit www.avaya.com.



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03/10 • SME5188