

Windows OS Laptop - Tablet		
Laptop(Tablet) - Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	OEM & Model/Part Number:	
Parameter	Attribute	Value
Processor	<i>Minimum Speed (Ghz)</i>	2.5 Ghz
	<i>TPM Support: Desktop and Mobile Architecture for System Hardware (DASH) 1.1 or equivalent to include either Intel's vPro or AMD's DASH 1.1 compliant</i>	YES
Memory	<i>Minimum Speed (Mhz)</i>	1333 Mhz
	<i>Minimum (GB)</i>	4
Display / Graphics	<i>Screen Size, Minimum (inches)</i>	12.1
	<i>Minimum Resolution (pixels, h x v)</i>	1366X768
	<i>Acceptable aspect ratios</i>	16:9 or 16:10
	<i>Integrated graphics acceptable</i>	YES
	<i>Dedicated video memory required</i>	NO
	<i>Shared video memory accepted</i>	YES
	<i>Graphics memory, minimum</i>	512 MB
Mouse	<i>Multi-touch touchpad/pointer stick</i>	Required
Speaker	<i>Internal</i>	YES
Networking	<i>Wireless</i>	802.11g/n
	<i>NIC speed, minimum (gbps)</i>	1 GB
	<i>Support for FIPS 140-2 and FIPS 802.11</i>	YES
USB 2.0	<i>number of ports, minimum</i>	3
Primary Hard Drive	<i>Interface</i>	SATA
	<i>Capacity, minimum (GB)</i>	250 GB
	<i>RPM, minimum</i>	4200
Optical Device	<i>Interface for external CD/DVD</i>	YES
Battery/AC Adapter	<i>Cells, minimum</i>	6 cell count and required to support a minimum run time, on battery, of 5 hours
	<i>eStar rated</i>	YES
Security	<i>Smart card reader (Internal)</i>	YES
Operating Systems Supported	<i>Windows 7, Enterprise Ed.</i>	YES
	<i>MS Certified for Win 7 (32 and 64 bit)</i>	YES
Docking Station	<i>Interface for port replicator</i>	YES
Other	<i>Trade Agreements Act of 1979 (TAA) compliant</i>	YES

Windows OS Laptop - Light		
Laptop(Light) - Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	OEM & Model/Part Number:	
Parameter	Attribute	Value
Processor	<i>Minimum Speed (Ghz)</i>	2.5Ghz
	<i>TPM Support: Desktop and Mobile Architecture for System Hardware (DASH) 1.1 or equivalent to include either Intel's vPro or AMD's DASH 1.1 compliant</i>	YES
	<i>Minimum Number of Cores</i>	2
Memory	<i>Minimum Speed (Mhz)</i>	1333 Minimum
	<i>Minimum (GB)</i>	4
Display / Graphics	<i>Screen Size, Minimum (inches)</i>	12.1
	<i>Minimum Resolution (pixels, h x v)</i>	1366X768 (or greater)
	<i>Acceptable aspect ratios</i>	16:9 or 16:10
	<i>Integrated graphics acceptable</i>	YES
	<i>Dedicated video memory required</i>	NO
	<i>Shared video memory accepted</i>	YES
	<i>Graphics memory, minimum</i>	512 MB
Mouse	<i>Multi-touch touchpad/pointer stick</i>	Required
Speaker	<i>Internal</i>	YES
Networking	<i>Wireless</i>	802.11g/n
	<i>NIC speed, minimum (gbps)</i>	1 GB
	<i>Support for FIPS 140-2 and FIPS 802.11</i>	YES
USB 2.0	<i>number of ports, minimum</i>	3
Primary Hard Drive	<i>Interface</i>	SATA
	<i>Capacity, minimum</i>	250 GB
	<i>RPM, minimum</i>	7200
Integrated Camera, 720p HD resolution	<i>Present</i>	YES
Optical Device	<i>Interface for external CD/DVD</i>	YES
Battery/AC Adapter	<i>Cells, minimum</i>	cell count required to support a minimum run time, on battery, of 5 hours
	<i>eStar rated</i>	YES
Security	<i>Smart card reader (Internal)</i>	YES
Operating Systems Supported	<i>Windows 7, Enterprise Ed.</i>	YES
	<i>MS Certified for Win 7 (32 and 64 bit)</i>	YES
Docking Station	<i>Interface for port replicator</i>	YES
Other	<i>Trade Agreements Act of 1979 (TAA) compliant</i>	YES

Windows OS Laptop - Medium		
Laptop(Medium) - Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	OEM & Model/Part Number:	
Parameter	Attribute	Value
Processor	Minimum Speed (Ghz)	2.5 Ghz
	TPM Support: Desktop and Mobile Architecture for System Hardware (DASH) 1.1 or equivalent to include either Intel's vPro or AMD's DASH 1.1 compliant	YES
	Minimum Number of Cores	2
Memory	Minimum Speed (Mhz)	1333 Minimum
	Minimum (GB)	4
Display / Graphics	Screen Size, Minimum (inches)	14
	Minimum Resolution (pixels, h x v)	1366X768
	Acceptable aspect ratios	16:9 or 16:10
	Integrated graphics acceptable	YES
	Dedicated video memory required	NO
	Shared video memory accepted	YES
	Graphics memory, minimum	512 MB
	Dual-head/link support	YES
Networking	Wireless	802.11g/n
	NIC speed, minimum (gbps)	1 GB
	Support for FIPS 140-2 and FIPS 802.11	YES
Monitor	Privacy Filter	YES
	Screen Size, Minimum (inches)	19"
	Minimum Resolution (pixels, h x v)	1366X768
Speaker	Internal	YES
Keyboard	Smart keyboard	YES
	USB connected	YES
Integrated Features	Hot buttons/hot key sequence to permit enabling/disabling of wireless networks, speaker, external monitor	YES
	Hot button/hot key sequence to permit enabling/disabling of touchpad	YES
Mouse	Multi-touch touchpad/pointer stick	Required
Keyboard Illumination	Backlit or other <u>integrated</u> keyboard lighting system	YES
USB 2.0	number of ports, minimum	3
Integrated Camera, 720p HD resolution	Present	YES
Primary Hard Drive	Interface	SATA
	Capacity, minimum (GB)	250
	RPM, minimum	7200
Optical Device	8X DVD +/- RW	YES
Battery/AC Adapter	Cells, minimum	cell count required to support a minimum run time, on battery, of 5 hours
	eStar rated	YES
Security	Smart card reader (Internal)	YES
Operating Systems Supported	Windows 7, Enterprise Ed.	YES
	MS Certified for Win 7 (32 and 64 bit)	YES
Docking Station	Interface for port replicator	YES
Other	Trade Agreements Act of 1979 (TAA) compliant	YES
	* VA requires 2 video outputs, either one of each or one VGA and multiple on the Digital on the larger docks is acceptable.	YES

Windows OS Laptop - Heavy		
Laptop(Heavy) - Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	OEM & Model/Part Number:	
Parameter	Attribute	Value
Processor	Minimum Speed (Ghz)	2.5
	TPM Support: Desktop and Mobile Architecture for System Hardware (DASH) 1.1 or equivalent to include either Intel's vPro or AMD's DASH 1.1 compliant	YES
	Number of Cores	QUAD
Memory	Minimum Speed (Mhz)	1333
	Minimum (GB)	4
Display / Graphics	Screen Size, Minimum (inches)	17
	Minimum Resolution (pixels, h x v)	1920x1080
	Acceptable aspect ratios	16:9 or 16:10
	Graphics memory, minimum	512 MB
	Dedicated video memory required	YES
	Shared video memory accepted	NO
	Dual-head support	YES
Speaker	Internal	YES
Integrated Features	Hot buttons/hot key sequence to permit enabling/disabling of wireless networks, speaker, external monitor	YES
	Hot button/hot key sequence to permit enabling/disabling of touchpad	YES
Mouse	Multi-touch touchpad/pointer stick	Required
Networking	Wireless	802.11g/n
	NIC speed, minimum (gbps)	1
	Support for FIPS 140-2 and FIPS 802.11	YES
USB 2.0	number of ports, minimum	4
Integrated Camera, 720p HD resolution	present	YES
Primary Hard Drive	Interface	SATA
	Capacity, minimum (GB)	250
	RPM, minimum	7200
Optical Device	8X DVD +/- RW	YES
Battery/AC Adapter	Cells, minimum	cell count required to support a minimum run time, on battery, of 5 hours
	eStar rated	YES
Security	Smart card reader (Internal)	YES
Operating Systems Supported	Windows 7, Enterprise Ed.	YES
	MS Certified for Win 7 (32 and 64 bit)	YES
Docking Station	Interface for port replicator	YES
Other	Trade Agreements Act of 1979 (TAA) compliant	YES

Windows OS Laptop - Semi-Rugged		
Laptop (Semi-Rugged) - Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	OEM & Model/Part Number:	
Parameter	Attribute	Value
Processor	Minimum Speed (Ghz)	2.5 Ghz
	TPM Support: Desktop and Mobile Architecture for System Hardware (DASH) 1.1 or equivalent to include either Intel's vPro or AMD's DASH 1.1 compliant	YES
	Minimum Number of Cores	2
Memory	Minimum Speed (Mhz)	1066
	Minimum (GB)	4
	Screen Size, Minimum (inches)	14
Display / Graphics	Minimum Resolution (pixels, h x v)	1366X768
	Acceptable aspect ratios	16:9 or 16:10
	Integrated graphics card	YES
	Graphics memory, minimum	512 MB
	Dedicated video memory required	NO
	Shared video memory accepted	YES
Networking	Wireless	802.11g/n
	NIC speed, minimum (gbps)	1 GB
	Support for FIPS 140-2 and FIPS 802.11	YES
	Concealed mode	YES
Keyboard and Input	LED Backlighting	YES
	Touchscreen LCD	YES
	Standard Sealed	YES
	protective keyboard membrane	YES
Mouse	Multi-touch touchpad/pointer stick	Required
USB 2.0	number of ports, minimum	4
Speaker	Internal	YES
Integrated Camera, 720p HD resolution	Present	YES
Primary Hard Drive	Interface	SATA
	Capacity, minimum (GB)	250
	RPM, minimum	5400
Optical Device	Internal CD/DVD	YES
Battery/AC Adapter	Cells, minimum	cell count required to support a minimum run time, on battery, of 5 hours
	eStar rated	YES
Security	Smart card reader (Internal)	YES
	Kensington Cable Lock slot	YES
Operating Systems Supported	Windows 7, Enterprise Ed.	YES
	MS Certified for Win 7 (32 and 64 bit)	YES
Durability Features	* Modified drop resistant (from heights of 29 inches) * High-altitude pressure resistant * Vibration resistant * Splash resistant * Dust resistant * Operational temperature of -20 deg to 140 deg Farenheit	YES
	Reinforced locking port covers	YES
Integrated Options	Backlit or integrated keyboard lighting system	YES
	HDD and battery Lock	YES
Docking Station	Interface for Port Replicator	YES
Other	Trade Agreements Act of 1979 (TAA) compliant	YES

Mac OS Laptop - Medium		
	Model/Part Number of machines that meet minimum requirements:	
Technical Specification		Minimum Requirements
General Requirement		
Parameter	Attribute	Medium (2.2GHz 15")
Processor	<i>Minimum Speed (Ghz)</i>	2.2
	<i>Number of Cores</i>	DUAL
Memory	<i>Minimum Speed (Ghz)</i>	800
	<i>Minimum (GB)</i>	4
Display / Graphics	<i>Screen Size, Minimum (inches)</i>	14"-15" range
	<i>Minimum Resolution (pixels, h x v)</i>	1440X900
	<i>Integrated graphics card</i>	YES
	<i>Integrated graphics card Memory, minimum</i>	384
	<i>Discrete graphics card</i>	YES
	<i>Discrete graphics card Memore, minimum</i>	1 GB
	<i>Wireless</i>	A+B+G+N
Mouse	<i>Multi-touch touchpad/pointer stick</i>	Required
Networking	<i>NIC speed, minimum (gbps)</i>	1
	<i>Support for FIPS 140-2 and FIPS 802.11</i>	YES
BACKLIT KEYBOARD	<i>Backlit</i>	YES
WIRED KEYBOARD	<i>Integrated or wired - no wireless</i>	YES - integrated
USB 2.0	<i>number of ports, minimum</i>	2
Integrated Camera, 2.0MP	<i>Present</i>	YES
Primary Hard Drive	<i>Interface</i>	SATA
	<i>Capacity, minimum (GB)</i>	320
	<i>RPM, minimum</i>	5400
Optical Device	<i>8X DVD +/- RW</i>	YES
Battery/AC Adapter	<i>Cells, minimum</i>	Cell count required to support a minimum run time, on battery, of 5 hours
	<i>eStar rated</i>	YES
Operating Systems Supported	<i>OS X 10.6 Snow Leopard</i>	YES
	<i>OS X 10.7 Lion</i>	Lion Ready

Mac OS Laptop - Heavy		
	Model/Part Number of machines that meet minimum requirements:	
Technical Specification		Minimum Requirements
General Requirement		Laptop
Parameter	Attribute	Heavy (17")
Processor	<i>Minimum Speed (Ghz)</i>	2.2
	<i>Number of Cores</i>	QUAD
Memory	<i>Minimum Speed (Ghz)</i>	800
	<i>Minimum (GB)</i>	4
Display / Graphics	<i>Screen Size, Minimum (inches)</i>	17
	<i>Minimum Resolution (pixels, h x v)</i>	1920x1200
	<i>Integrated graphics card</i>	YES
	<i>Integrated graphics card Memory, minimum</i>	384
	<i>Discrete graphics card</i>	YES
	<i>Discrete graphics card Memore, minimum</i>	1
	<i>Wireless</i>	A+B+G+N
Mouse	<i>Multi-touch touchpad/pointer stick</i>	Required
Networking	<i>NIC speed, minimum (gbps)</i>	1
	<i>Support for FIPS 140-2 and FIPS 802.11</i>	YES
BACKLIT KEYBOARD	<i>Backlit</i>	YES
WIRED KEYBOARD	<i>Integrated or wired - no wireless</i>	YES - integrated
USB 2.0	<i>number of ports, minimum</i>	2
Integrated Camera, 2.0MP	<i>Present</i>	YES
Primary Hard Drive	<i>Interface</i>	SATA
	<i>Capacity, minimum (GB)</i>	500
	<i>RPM, minimum</i>	5400
Optical Device	<i>8X DVD +/- RW</i>	YES
Battery/AC Adapter	<i>Cells, minimum</i>	Cell count required to support a minimum run time, on battery, of 5 hours
	<i>eStar rated</i>	YES
Operating Systems Supported	<i>OS X 10.6 Snow Leopard</i>	YES
	<i>OS X 10.7 Lion</i>	Lion Ready

Mac OS Desktop		
	Model/Part Number of machines that meet minimum requirements:	
Technical Specification		Minimum Requirements
General Requirement		Desktop
Parameter	Attribute	All- in- One
Processor	<i>Minimum Speed (Ghz)</i>	2.5
	<i>Number of Cores</i>	QUAD
Memory	<i>Minimum Speed (Ghz)</i>	1333
	<i>Minimum (GB)</i>	4
Display / Graphics	<i>Screen Size, Minimum (inches)</i>	21
	<i>Minimum Resolution (pixels, h x v)</i>	1920x1080
	<i>Integrated graphics card</i>	
	<i>Integrated graphics card Memory, minimum</i>	
	<i>Discrete graphics card</i>	YES
	<i>Discrete graphics card Memore, minimum</i>	512
	<i>Wireless</i>	A+B+G+N
Mouse	<i>Multi-touch touchpad/pointer stick</i>	Required
Networking	<i>NIC speed, minimum (gbps)</i>	1
	<i>Support for FIPS 140-2 and FIPS 802.11</i>	YES
BACKLIT KEYBOARD	<i>Backlit</i>	NO
WIRED KEYBOARD	<i>Integrated or wired - no wireless</i>	YES - must be specified.
USB 2.0	<i>number of ports, minimum</i>	4
Integrated Camera, 2.0MP	<i>Present</i>	YES
Primary Hard Drive	<i>Interface</i>	SATA
	<i>Capacity, minimum (GB)</i>	500
	<i>RPM, minimum</i>	7200
Optical Device	<i>8X DVD +/- RW</i>	YES
Battery/AC Adapter	<i>Cells, minimum</i>	NA
	<i>eStar rated</i>	YES
Operating Systems Supported	<i>OS X 10.6 Snow Leopard</i>	YES
	<i>OS X 10.7 Lion</i>	Lion Ready

Windows OS Thin Client		
Thin Client - Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	OEM and Model/Part Number:	
Parameter	Attribute	Value
Processor	Minimum Speed (Ghz)	1Ghz
Memory	DDR (Minimum)	2GB
	Flash (Minimum)	2GB
Display / Graphics	Display (Dual Display Support)	1 VGA/1 DVI
	Resolution Support minimum	1680x1050
Mouse	USB	Y
Keyboard	USB	Y
Networking	Wireless (Optional)	802.11 g/n
	Ethernet - 10/100/1000 Gigabit	Y
	Support for FIPS 140-2 and FIPS 802.11	Y
Media Drive	CD/DVD	N
USB 2.0	Number of ports, minimum	6
Power In	eStar rated	Y
Security	Smart card reader (Internal/external)	Y
	(if external card reader it cannot take one of the required USD ports)	
Height	Minimum	7"
Width	Minimum	1"
Depth	Minimum	8"
Operating Systems Supported (Thin Clients)	Windows Embedded Standard 7	
Virtualization Platforms Supported (Zero Clients)	Citrix/Vmware/Microsoft	

Monitors - Small		
Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	Model/Part Number:	
Parameter	Attribute	Value
Display	Minimum Viewable Size	18.5"
Display	Type	Widescreen
Display	Resolution (Minimum)	1366x768
Display	Display Position Adjustments	Tilt
Display	Minimum Response Time	5ms
Display	Aspect Ratio	16x9
Interface	VGA Input	Yes
Interface	DVI-D Input	Yes
Environmental	Energy Star Qualified	Yes

Monitors - Large		
Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	Model/Part Number:	
Parameter	Attribute	Value
Display	Minimum Viewable Size	21.5"
Display	Type	Widescreen
Display	Resolution (Minimum)	1920x1080
Display	Display Position Adjustments	Tilt
Display	Minimum Response Time	5ms
Display	Aspect Ratio	16x9
Interface	VGA Input	Yes
Interface	DVI-D Input	Yes
Environmental	Energy Star Qualified	Yes

Attachment B - End User Device Specifications

Docking Station		
Technical Specification	Minimum Requirements	
General Requirement - Model Proposed (Please include manufacturer's part number)	Model/Part Number:	
Parameter	Attribute	Value
Docking Station	<i>Interface for port replicator</i>	YES
	<i>Hot docking capability</i>	YES
	<i>Integrated support for two (2) dual external monitors</i>	YES
	<i>DVI / 2*</i>	YES
	<i>USB ports</i>	5
	<i>Locking device to secure laptop to dock/replicator required</i>	YES
	<i>Locking device to secure docking station/replicator to a fixed object (desk)</i>	YES
	<i>NIC port</i>	YES
	<i>Printer/Com Port</i>	YES
	<i>Integrated 10/100 Ethernet LAN with RJ45 connector</i>	YES
	<i>HDMI or DisplayPort /2*</i>	YES