

Desktop Computers

<u>Desktop Computer Minimum Requirements:</u>	DESKTOP STANDARD		DESKTOP ADVANCED	
Processor Technology:	Intel® Core™ 2 Duo 45 nm	OR	AMD Phenom™ X3 65nm	Intel® Core™ 2 Duo 45 nm
Processor Cache :	3 MB L2 cache		1.5 MB L2 cache	3 MB L2 cache
Processor Frequency:	Min 2.53 GHz		Min 2.3 GHz	Min 2.93 GHz
Chipset	Intel or Equivalent		AMD or Equivalent	Intel or Equivalent
RAM:	2 GB DDR2-800 non ECC		4 GB DDR2-800 non ECC	
Hard disk drive Size :	160GB		250GB	
Hard disk drive Speed :	7,200rpm SATA 3.0Gb/s		7,200rpm SATA 3.0Gb/s	
Disk subsystem controller:	4 Serial ATA 3.0 GB/s		SMART III Serial ATA 3.0 GB/s, minimum 4 Serial ATA interfaces and support of RAID 1	
Graphic :	Integrated graphics card, DVI output Graphics, minimum 256 MB of video memory		Dedicated graphics card x16 PCIe Graphics on Slot, minimum 256 MB on card video memory with VGA & DVI	
Media Device :	16X DVD+/-RW Drive		16X DVD+/-RW Drive & Licensed Burning Software	
Keyboard :	Standard Keyboard English		Standard Keyboard English	
Mouse:	Minimum 2 Button scroll Optical		Minimum 2 Button scroll Optical	
Ports:	Rear (4) USB 2.0, (1) RJ-45, audio in/out, Front : (2) USB, headphone and microphone		Rear (4) USB 2.0, (1) RJ-45, audio in/out, Front : (2) USB, headphone and microphone	
Slots:	Minimum (1) PCI slots and (1) PCIe slots		Minimum (2) PCI slots and (1) PCIe slots	
Networking:	10/100/1000 LAN Integrated Gigabit Ethernet card		10/100/1000 LAN Integrated Gigabit Ethernet card	
Multimedia :	Sound Card		Sound Card	

Speakers:	Internal or Built-in Monitor	Internal or Built-in Monitor
Security management:	N/A	Embedded Security TPM
Preinstalled Licensed Operating Software:	OEM Windows 7® Professional Edition	OEM Windows 7® Professional Edition
System Recovery Solution Included	Automatic Recovery Solution to Factory Settings	Automatic Recovery Solution to Factory Settings
Monitor:	19" TFT Flat Panel Display 1280 x 1024 resolution, DVI support, Energy Star, TCO-03	19" TFT Flat Panel Display 1280 x 1024 resolution, DVI support, Energy Star, TCO-03
Warranty	Warranty 3 years	Warranty 3 years

Desktop Workstation

<u>Desktop Workstation Minimum Requirements:</u>	WORKSTATION BASIC		WORKSTATION PROFESSIONAL only for professional use (accad,3dmax)		
Processor :	Intel® Core™ 2 Quad 45 nm	OR	AMD Phenom™ II X4 45nm	2 x Intel® Xeon™ Quad Core 45 nm	AMD Opteron Quad Core 3 Generation
Processor Cache :	12 MB L2 cache		2 MB L2 cache	12 MB L2 cache	2 MB L2 cache
Processor Frequency:	Min 2.66 GHz		Min 2.8 GHz	Min 2.0 GHz	Min 2.0 GHz
Chipset	Intel or Equivalent		AMD or Equivalent	Intel or Equivalent	AMD or Equivalent
RAM:	4 GB DDR2-800 ECC		8 GB DDR2-800 ECC		
Hard disk drive Size:	250GB		2 x500GB		
Hard disk drive Speed :	7,200rpm SATA 3.0Gb/s		7,200rpm SATA 3.0Gb/s		

<i>Disk subsystem controller:</i>	SMART III Serial ATA 3.0 GB/s, minimum 4 Serial ATA interfaces with RAID 1 support	SMART III Serial ATA 3.0 GB/s, minimum 4 Serial ATA interfaces with RAID 1,5 Support. (Hard Disks Configured RAID 1)
<i>Graphic :</i>	Dedicated graphics card x16 PCIe Graphics on Slot, minimum 256 MB on card video memory with VGA & DVI	Dedicated graphics card x16 PCIe Graphics on Slot, minimum 512 MB on card video memory with VGA & DVI
<i>Media Device :</i>	16X DVD+/-RW Drive & Licensed Burning Software	16X DVD+/-RW Drive & Licensed Burning Software
<i>Keyboard :</i>	Standard Keyboard English	Standard Keyboard English
<i>Mouse:</i>	Minimum 3 Button scroll Optical	Minimum 3 Button scroll Optical
<i>Ports:</i>	(6) USB 2.0, (1)serial port, (1) RJ-45, audio in/out, Front : (2) USB, headphone and microphone, e-Sata, FireWire	(6) USB 2.0, (1)serial port, (1) RJ-45, audio in/out, Front : (2) USB, headphone and microphone, e-Sata, FireWire
<i>Slots:</i>	(3) PCI slots and (2) PCIe x 16 slots	(3) PCI slots and (2) PCIe x 16 slots
<i>Networking:</i>	Minimum 1 X 10/100/1000 LAN Integrated Gigabit Ethernet card	Minimum 2 X 10/100/1000 LAN Integrated Gigabit Ethernet card
<i>Multimedia :</i>	Sound card	Sound card
<i>Speakers:</i>	Internal or Builtin Monitor	Internal or Builtin Monitor
<i>Security management:</i>	Embedded Security TPM	Embedded Security TPM
<i>Preinstalled Licensed Operating Software:</i>	OEM Windows 7® Professional Edition 64 Bit	OEM Windows 7® Professional Edition 64 Bit
<i>System Recovery CD Incl</i>	Automatic Recovery Solution to Factory Settings	Automatic Recovery Solution to Factory Settings
<i>Monitor:</i>	22" TFT Flat Panel Display 1680 x 1050 resolution, DVI support,Energy Star, TCO-03	22" TFT Flat Panel Display 1680 x 1050 resolution, DVI support,Energy Star, TCO-03
<i>Warranty</i>	Warranty 3 years	Warranty 3 years

Laptops

Portable Computer Minimum Requirements:

Processor Technology:

Processor Cache :

Processor Frequency:

Chipset

RAM:

Hard disk drive :

Graphic :

Media Device :

Network Card:

Wireless Connectivity:

Audio:

Pointing Device:

External Ports:

Laptop basic

Intel® Core™ 2 Duo	OR	AMD Turion™ X2
2 MB L2 cache		1 MB L2 cache
Min 2 GHz		Min 2.1 GHz
Intel or Equivalent		AMD or Equivalent

2GB Dual Channel 667MHz DDR2

Not less than 160 GB 5400 RPM SATA

Integrated Graphics with 128MB video memory

card reader 5 in one memory card reader

10/100/1000 gigabit NIC

802.11 b and g

High Definition Audio 2.0

Touch pad & usb mouse

USB 2.0 (3)
Integrated LAN (RJ45)
5-in-1 Memory Card Reader
VGA video output &/ or DVI-D
1 ExpressCard 54mm Slot
Integrated digital mics
Headphone jacks
Microphone jack

Laptop Advanced

Intel® Core™ 2 Duo	OR	AMD Turion™ X2 Ultra
6 MB L2 cache		2 MB L2 cache
Min 2.66 GHz		Min 2.2 GHz
Intel or Equivalent		AMD or Equivalent

4GB Dual Channel 667 MHz DDR2

Not less than: 250GB SATA Hard Drive (7200RPM)

Professional Graphics with Minimum 256MB of dedicated video memory

card reader 5 in one memory card reader

10/100/1000 gigabit NIC

802.11 b and g Bluetooth

High Definition Audio 2.0

Touch pad & usb mouse

USB 2.0 (4)
Integrated LAN (RJ45)
5-in-1 Memory Card Reader
VGA video output & DVI-D port with HDCP support
Fast infrared (FIR) port
1 ExpressCard 54mm Slot
Integrated digital mics
Headphone jacks
Microphone jack

Battery:	6-cell battery	9-cell battery
Preinstalled Licensed Operating Software:	OEM Windows 7® Professional Edition	OEM Windows 7® Professional Edition
System Recovery CD included	Automatic Recovery Solution to Factory Status	Automatic Recovery Solution to factory status
Display:	15" to 16" Wide Screen XGA (1280x800) display	Min 17" Wide Screen XGA (1280x800) display
Notebook Case:	Manufacture Carrying Case Included	Manufacture Leather Carrying Case Included
Optical storage device.	DVD+/-RW with Dual Layer DVD+R write capacity	DVD+/-RW with Dual Layer DVD+R write capacity
Warranty	warranty 3 years	warranty 3 years

UPS

UPS Minimum Requirements	UPS Type 1	UPS Type 2
Power :	650 VA	1000VA
Input voltage :	220/230/240 VAC	220/230/240 VAC
Input voltage window :	180 – 260 VAC	170 – 270 VAC
Output voltage	220/230/240 VAC	220/230/240 VAC
Voltage regulation (On battery) :	+/-10%	+/-10%
Output frequency :	50 Hz	50 Hz
Transfer time :	jo me shume se 4ms	jo me shume se 4ms
Protection :	Discharge, overcharge	Discharge, overcharge
Back-Up time :	Min. 5 min full load	Min. 5 min full load
AVR :	YES	YES
Outlets:	2 outlets IEC 320 C13 + 1 surge outlets IEC 320 C13, 2 RJ11 connectors for fax / modem protection ,telephone cable provided	3 outlets IEC 320 C13 + 1 surge outlets IEC 320 C13, 2 RJ11 connectors for fax / modem protection ,telephone cable provided
Shutdown Software :	N/A	YES
Standard Warranty	2 vjet	2 vjet

pecScanner

<u>Scanner Minimum Requirements:</u>
<i>type</i>
<i>max size</i>
<i>grayscale depth</i>
<i>color depth</i>
<i>optical resolution</i>
<i>scan mode</i>
<i>media feeder type</i>
<i>interfaces</i>
<i>power</i>
<i>software</i>
<i>warranty</i>

Scanner Type 1
flatbed
A4
16
48
1200x4800
single pass
manual
usb
240 V
Drivers
1 years

Scanner Type 2
flatbed
A4
16
48
4800x9600
single pass
manual/authomatic with ADF
usb
240V
at least OCR
3 years

Copy machine

<u>Multifunctional Network Copy Machine Minimum Requirements:</u>
<i>Model</i>
Copy/Print speed for A4 B&W:
<i>Monthly duty cycle :</i>
<i>Technology :</i>

Stand Alone B & W Copy machine
copier/printer
Min 20ppm
20,000
Laser bw

Color MFP basic
copier/print/scanner
min 25ppm
50,000
Laser color/bw

Color MFP advanced
copier/print/scanner
min 35ppm
100,000
Laser color/bw

High Volume Copy machine
copier/print/scanner
min 50ppm
300,000
Laser B & W

Reduction/Enlargement:	min 25%-200%	25%-200%	25%-200%	25%-400%
Document Feeder	N/A	RADF	RADF	RADF
Paper trays	1	2	2	4
Input capacity min	250	500	500	1000
Output capacity min:	250	250	250	500
Duplex copying/printing :	N/A	yes	yes	yes
Media sizes :	a3/a4	a3/a4	a3/a4	a3/a4
Memory:	>64	>256	>512M	>512MB
Hard disk:	N/A	20G	20G	40G
Scan speed:	N/A	25	25	50
Scan resolution	N/A	600x600dpi	600x600dpi	600x600dpi
Maximum scan size :	N/A	a3	a3	a3
Connectivity :	USB	USB,Ethernet	USB,Ethernet	USB,Ethernet
Toner:	min 3,000	Minimum 5,000 pages	Minimum 10,000 pages	Minimum 45,000 pages

Projektor

Projector Minimum Requirements:	Projector Standard
Model	DTV/HDTV Compatible
Ansi Lumen:	2300
Resolution:	Min 1024 x 768
Input signals:	DTV, NTSC,PAL, Computer RGB
Input terminals	DVI-D (Compatible with HDCP) , Computer Component , S-Video, Video (RCA), Audio stereo , Audio (RCA) (L/R)
Output terminals:	Computer / Component , Audio stereo

Interface:	USB , RS-232C
Horizontal frequency:	15 - 70 kHz
Vertical frequency:	45 - 85 Hz
Lamp life:	Minimum 3500 Hours (Standard Mode)
Contrast ratio:	Minimum 2000:1
Lens:	F number, Zoom manual, Focus manual
Accessories:	Remote control, power cord , RGB cable , lens cap, operation manual, CD-ROM, PC-Mouse control (via USB) , Carrying Case
Warranty	2 vjet

Printer BW, color

Printer Minimum Requirements:	Printer Standard	Printer Advanced	Standart color	Advanced color
Print speed :	20 ppm	30 ppm	10 ppm	20 ppm
Monthly duty cycle :	15000 pages	50000 pages	15000 pages	30000 pages
Print quality:	At least 1200 x 600 dpi	At least 1200 x 1200 dpi	At least 600 x 600 dpi	At least 1200 x 1200 dpi
Input capacity	250	500	250	500
Media sizes :	60 - 120 g/m2	60 - 120 g/m2	60 - 120 g/m2	60 - 120 g/m2
Media types :	A4, A5,Envelope	A4, A5,Envelope	A4, A5,Envelope	A4, A5,Envelope
Memory:	32MB	64 MB	64 MB	256 MB
Connectivity :	USB	USB, ethernet	USB	USB, ethernet
Toner:	3000 pages	5000 pages	1500 pages	3000 pages
Warranty	2 vjet			

