

Desktop Computers

Desktop computers fall into three main families:

- **Tower:**
The traditional desktop computer has a large and roomy upright case (which, due to its size, usually sits under the desk). While bulky, it offers unmatched versatility and the opportunity to upgrade or replace parts to extend the capabilities or life of the unit. The mini tower (upright) and horizontal form factor models have less room inside.
- **Compact:**
Also known as small form factor (SFF) or Mini PCs, these sandwich-sized computers include cut-down components like an all-in-one, but with no built-in screen.
- **All-in-one:**
If there is a requirement for a general purpose desktop computer with a big screen but compact size, an all-in-one could be used. These self-contained desktop computers house all the components plus the monitor in a single unit that looks just like a desktop monitor. The computer itself is usually built-in behind the screen.

However, a modular PC (tower or compact models have following advantages than the All-in-one PC:
Connections: on a tower model the extra space usually means can find a wider range of connection ports.

Cooling: bigger fans and more room means better cooling, so can use top-end components such as faster processors and graphics cards.

Space: a traditional desktop case provides much more space inside, compared to a laptop or an all-in-one model. This leaves more room for extra drives or a second graphics card.

Upgrades: a traditional desktop tower-style case offers much more flexibility for upgrading or replacing parts, so your desktop PC can last much longer with a few well-chosen upgrades.

Choosing the right desktop computer

The Government organizations can select the suitable desktop computers under three levels mentioned below. The levels are categorized based on the user requirements and price.

- **Entry level**
A cheaper computer built to cover all basic activities such as browsing the internet, writing emails and using office productivity software such as word, spreadsheet, etc.
- **Mid-Range**
This type is typically aimed to use for web browsing, email, office programs and other general / special purpose software such as accounting software, Inventory control system, MIS, etc.
- **High-End**
For technology and games enthusiasts and multimedia professionals who require superior performance for intensive programs such as video/audio editing, 3D rendering and advanced games. Most people will only require a mid-range system – and there's plenty of scope available in this category, depending on the type of processor, graphics card and storage that can choose. It is not advisable just consider a user's current needs. Buy a system that will still serve user well for the next three years or so.

Specifications for Desktop Computers

Entry Level

Item	Minimum Specification	Bidder's Compliance	
		Yes/No	If 'No' indicate your offer
Brand	(Branded)		
Model	(Branded)		
Country of Origin & Country of Manufacture / assembly	(Branded)		
Processor	Intel® Core i3-9100 9th Generation Processor 3.6 GHz / AMD Ryzen™ 3 PRO 3200G Processor 3.60GHz or better		
Clock Speed	3.5GHz Actual clock speed or Higher		
Cache	6 MB L2/L3 cache or Higher		
Form Factor	Business Desktop		
Chassis	Mini/Micro tower business desktop casing with locking facility		
Chipset	Intel Express B / H Business Chipset / AMD B Chipset or Higher (Specify)		
Mother board	Should be the same quoted brand (Serial number of the CPU should show in BIOS)		
Memory	4 GB DDR 4 2666MHz or higher		
Maximum memory	Upgradeable to Maximum of 16 GB RAM		
Memory Dims	2 Dims		
Hard disk	1TB Serial ATA Minimum		
Keyboard	128 Key Standard Keyboard to be as same brand in English		
Mouse	Two buttons with scroll wheel optical Mouse with mouse pad		
Optical drive	SATA DVD drive (+/-RW)		
Expansion slots	Minimum 2 Expansion slots including 1 Nos PCI x 16, (Specify)		
Video controller	Intel UHD Graphics 630 / Radeon™ Vega 8 Graphics		
Network interface	Gigabit Ethernet network Interface card (10/100/1000) Internal Wi-Fi card - USB Dongle is not accepted		
I/O ports	Minimum 8 USB Ports at least 2 Nos 3.1 USB, Including Minimum, 1 HDMI Port 1, VGA Port		
Power Supply	250W PFC, or Better Power Supply		

Operating system	Windows 10 Pro / Linux / Ubuntu 18.04+		
Application Software	Sinhala and Tamil Unicode Software Commercial Anti-virus with license for 3 years		
Product certifications of the quoted Model	Product certifications of the quoted Model Energy Star or any other equal certificate to Energy Star, issued by authorized body who has the authority to do so, (Documentary evidence must be provided) Valid ISO 9001: 2015, & ISO 14001:2015 Offered Model must possess FCC or CE or Equal		
Display	18.5" as above wide screen Color LED Monitor supporting resolutions WXGA widescreen or better, Should be the same brand of the Desktop		
Manufacture Experience	Manufacturer should have a minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		
Bidders Experience	The bidder should have successfully sold same similar product for last 3 years (Bidder should provide documentary evidence to support the above)		
Manufacturer Authorization Certificate	Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty	Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network Documentary evidence to be provided of the following under bidders' name. (a) Address, Contact Details & Date of Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each branch/regional) -		

Warranty Information	<p>Should be fix a sticker with</p> <ul style="list-style-type: none"> -Supplier name -Contact Numbers -Date of Commissioning of Hardware -Warranty period <p>In all computers</p>		
Brochure	Supplier should provide brochure of make/model quoted as per above specification		

Mid-Range

Features	Required Specification	Bidders Compliance	
		Yes/No	If No, Bidders Response
Brand	(Branded)		
Model	(Branded)		
Country of Origin & Country of Manufacture / assembly	(Branded)		
Processor	Intel® Core i5-9400 9th Generation Processor 2.9 GHz / AMD Ryzen™ 5 PRO 3400G Processor 4.20GHz Or better		
Clock Speed	2.9GHz Actual clock speed or Higher		
Cache	9 MB L2 cache or Higher		
Form Factor	Business Desktop		
Chassis	Mini/Micro tower business desktop casing with locking facility (mini padlock with 3 keys should be supplied)		
Chipset	Intel Express B / H Business Chipset/ AMD B Chipset or Higher (Specify)		
Mother board	Should be the same quoted brand (Serial number of the CPU should show in BIOS)		
Memory	8 GB DDR 4 2666MHz or higher		
Maximum memory	Upgradeable to Maximum of 16 GB RAM		
Memory Dims	2 Dims		
Hard disk	1TB Serial ATA Minimum		
Keyboard	128 Key Standard Keyboard to be as same brand in English		
Mouse	Two buttons with scroll wheel optical Mouse with mouse pad		
Optical drive	SATA DVD drive (+/-RW)		
Expansion slots	Minimum 2 Expansion slots including 1 Nos PCI x 16, (Specify)		
Video controller	Intel UHD Graphics 630 / Radeon™ Vega 11 Graphics		
Network interface	Gigabit Ethernet network Interface card (10/100/1000) Internal Wi-Fi card - USB Dongle is not accepted		
I/O ports	Minimum 8 USB Ports at least 2 Nos 3.1 USB, Including Minimum, 1 HDMI Port 1, VGA Port		
Power Supply	250W PFC, auto-sensing, 80 PLUS# Platinum, or higher Power Supply		
Operating system	Windows 10 Pro / Linux / Ubuntu18.04+		

Application Software	Sinhala and Tamil Unicode Software Commercial Anti-virus with license for 3 years		
Product certifications of the quoted Model	Product certifications of the quoted Model Energy Star or any other equal certificate to Energy Star, issued by authorized body who has the authority to do so, (Documentary evidence must be provided) Valid ISO 9001: 2015, & ISO 14001:2015 Offered Model must possess FCC or CE or Equal		
Display	19.5" wide screen Color LED Monitor supporting resolutions WXGA wide screen or better, Should be the same brand of the Desktop		
Manufacture Experience	Manufacturer should have minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		
Bidders Experience	The bidder should have successfully sold same similar product for last 3 years (Bidder should provide documentary evidence to support the above)		
Manufacturer Authorization Certificate	Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty	Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network Documentary evidence to be provided of the following under bidders' name. (a) Address, Contact Details & Date of Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each ranch/regional)		
Warranty Information	Should be fix a sticker with -Supplier name -Contact Numbers -Date of Commissioning of Hardware -Warranty period In all computers		
Brochure	Supplier should provide brochure of make/model quoted as per above specification		

High-End

Features	Required Specification	Bidders Compliance	
		Yes/No	If No, Bidders Response
Brand	(Branded)		
Model	(Branded)		
Country of Origin & Country of Manufacture / assembly	(Branded)		
Processor	Intel® Core i7-9700 9th Generation Processor 3.0 GHz / AMD Ryzen™ 7 PRO 3700 Processor 3.60GHz Or better		
Clock Speed	3.0. GHz Actual clock speed or Higher		
Cache	12 MB L2 cache or Higher		
Form Factor	Business Desktop		
Chassis	Mini/Micro tower business desktop casing with locking facility		
Chipset	Intel Express B / Q Business Chipset / AMD B Chipset or Higher (Specify)		
Mother board	Should be the same quoted brand (Serial number of the CPU should show in BIOS)		
Memory	16 GB DDR 4 2666MHz or higher		
Maximum memory	Upgradeable to Maximum of 32 GB RAM		
Memory Dims	2 Dims		
Hard disk	1TB SATA HDD+256GB M2 SSD		
Keyboard	128 Standard same brand keyboard		
Mouse	Two buttons with scroll wheel optical Mouse with pad		
Optical drive	SATA DVD drive (+/-RW) -Optional		
Expansion slots	Minimum 2 Expansion slots including 1 Nos PCI x 16, (Specify)		
Video controller	Intel UHD Graphics 630 / Radeon™ Vega 11 Graphics		
Network interface	Gigabit Ethernet network Interface card (10/100/1000) Internal Wi-Fi card - USB Dongle is not accepted		
I/O ports	Minimum 8 USB Ports at least 2 Nos 3.1 USB, Including Minimum, 1 HDMI Port 1, VGA Port		
Operating system	Windows 10 Pro / Linux / Ubuntu 18.04+		
Application Software	Sinhala and Tamil Unicode Software Commercial Anti-virus with license for 3 years		
Product certifications of the quoted Model	Product certifications of the quoted Model Energy Star or any other equal certificate to Energy Star, issued by authorized body who has		

	the authority to do so, (Documentary evidence must be provided) Valid ISO 9001: 2015, & ISO 14001:2015 Offered Model must possess FCC or CE or Equal		
Display	19.5" wide screen Color LED Monitor supporting resolutions WXGA wide screen or better, should be the same brand of the Desktop		
Manufacture Experience	Manufacturer should have minimum of ten years' experience in manufacturing of the same brand. (Proof document should be attached)		
Bidders Experience	The bidder should have successfully sold same Similar Product for last 3 years (Bidder should provide documentary evidence to support the above)		
Manufacturer authorization Certificate	Manufacturer Authorization Certificate should be provided (Originals should be provided on request)		
Warranty	Comprehensive on-site manufacturer authorized warranty for 36 months (Labor & Parts) Excluding Consumes. Bidder or its parent company or its subsidiary should have Island wide owned branch network Documentary evidence to be provided of the following under bidders' name. (a) Address, Contact Details & Date of Commencement of each branch/regional office (Should have completed minimum of 5 years from the Date of Commencement of each ranch/regional)		
Warranty Information	Should be fix a sticker with -Supplier name -Contact Numbers -Date of Commissioning of Hardware -Warranty period In all computers		
Brochure	Supplier should provide brochure of make/model quoted as per above specification		

Content References:

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