# DELHI TECHNOLOGICAL UNIVERSITY

# (FORMERLY DELHI COLLEGE OF ENGINEERING) GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI SHAHBAD DAULATPUR: BAWANA ROAD: DELHI-110 042

Email: sandpdepttdtu@gmail.com; Ph. 27871018

No. F. DTU/SP/211/19-01/19-20/

Dated:

#### **NOTICE INVITING TENDER**

E- Tenders along with illustrated literature/leaflets for the supply/execution of item(s)/stores/work detailed below are invited from the Manufacturers or their Authorized Distributors/Dealer only in two-bids system\_ through 'e' procurement solution only as per the guidelines and terms & conditions given in tender document - details of the NIT along with terms & conditions, specifications etc. can be seen/downloaded at/from the website.

The interested tenderers should upload duly signed tender form and their bids along with scanned copies of all the relevant certificates, documents etc. in support of their technical & price bids – all duly signed - on the: <a href="https://govtprocurement.delhi.gov.in">https://govtprocurement.delhi.gov.in</a>. latest by 11.07.19 at 2:30 P.M. An index prepared after pagination of all documents may also be uploaded. The technical bids will be opened online on 11.07.19 at 3:00 P.M. {those bidders only whose original instrument of EMD amount is dropped in Tender Box placed in the office of Assistant Registrar(S&P)} in the presence of the bidders who wish to be present and will also be displayed on the website. For participation in the tender through e-procurement solution, the tenderers are required to have digital certificate and get registered with application Service Provider NIC.

Tender document is also available for viewing on the website of Delhi Technological University, Delhi at <a href="https://www.dtu.ac.in">www.dtu.ac.in</a>

Yours faithfully,

EMD: Rs. 50,000 /-

Assistant Registrar(S&P)

S.no.	DESCRIPTION	Required
		quantity
1.	Supply of Graphical Processing Unit and allied accessories	As mentioned
	Complete set; as per specification	below

Detailed specification on next page.....

# Technical Specification of Graphical Processing Unit and allied accessories

Name of the item with detailed specifications			Required Quantity			
			(Nos.)			
Gigabyte AORUS GeForce GTX 1070 8GB Graphic Cards(GV-N1070AORUS-8GD REV2.0) with						
triple fans(GPU)						
PRODUCT DESCRIPTION						
GIGABYTE AORUS GeForce GTX 1070 8GB Graphic Card GV-N1070AORUS-8GD MODEL						
Brand		GIGABYTE				
Series		AORUS				
Model		GV-N1070AORUS-8GD R2				
INTERFACE						
Interface		PCI Express 3.0 x16				
CHIPSET						
Chipset Manufacturer NVIDIA						
GPU Series		NVIDIA GeForce GTX 10 Series				
GPU		GeForce GTX 1070				
Core Clock 1632 MHz (OC Mode) 1607 MHz (Gaming Mode)						
Boost Clock 1835 MHz (OC Mode) 1797 MHz (Gaming Mode)						
CUDA Cores		1920				
MEMORY						
Effective Memory Clock	8008 MI	Hz				
Memory Size		8GB				
Memory Interface		256-Bit				
Memory Type GDDR5X						
3D API						
DirectX	DirectX	12				
OpenGL	OpenGL	4.5				
	Gigabyte AORUS GeForce triple fans(GPU)  PRODUCT DESCRIPTION  GIGABYTE AORUS GeForm MODEL Brand  Series  Model  INTERFACE Interface  CHIPSET Chipset Manufacturer  GPU Series  GPU  Core Clock  Boost Clock  CUDA Cores  MEMORY Effective Memory Clock  Memory Size  Memory Interface  Memory Type  3D API DirectX	Gigabyte AORUS GeForce GTX 1070 triple fans(GPU)  PRODUCT DESCRIPTION  GIGABYTE AORUS GeForce GTX 1070 MODEL Brand  Series  Model  INTERFACE Interface  CHIPSET Chipset Manufacturer  GPU Series  GPU  Core Clock  Boost Clock  CUDA Cores  MEMORY Effective Memory Clock 8008 Mill  Memory Size  Memory Interface  Memory Type  3D API DirectX  DirectX	Gigabyte AORUS GeForce GTX 1070 8GB Graphic Cards(GV-N1070AORUS-8GD REV2.0) with triple fans(GPU)  PRODUCT DESCRIPTION  GIGABYTE AORUS GeForce GTX 1070 8GB Graphic Card GV-N1070AORUS-8GD  MODEL Brand GIGABYTE  Series AORUS  Model GV-N1070AORUS-8GD R2  INTERFACE Interface PCI Express 3.0 x16  CHIPSET Chipset Manufacturer NVIDIA  GPU Series NVIDIA GeForce GTX 10 Series  GPU GeForce GTX 1070  Core Clock 1632 MHz (OC Mode) 1607 MHz (Gaming Mode)  Boost Clock 1835 MHz (OC Mode) 1797 MHz (Gaming Mode)  CUDA Cores 1920  MEMORY Effective Memory Clock 8008 MHz  Memory Size 8GB  Memory Interface 256-Bit  Memory Type GDDR5X  3D API DirectX  DirectX 1070  DirectX			

**PORTS** 

HDMI 3 x HDMI

Multi-Monitor Support 4

DisplayPort 3 x DisplayPort

DVI 1 x Dual-Link DVI-D

**DETAILS** 

Max Resolution 7680 x 4320

SLI Support 2-Way SLI

Virtual Reality Ready Yes

Cooler WINDFORCE STACK

System Requirements System PSU Limitation: 500W

Power Connector 1 x 6-Pin &1 x 8-Pin

Dual-Link DVI Supported Yes

Cooling Fans 3 (Triple Fans)

FEATURES Features

Powered by GeForce GTX 1070

WINDFORCE Stack 3 x 100mm fan cooling system AORUS VR Link provides the best VR experience

Advanced Copper Back Plate Cooling

RGB fusion – 16.7M customizable color lighting

Stylish Metal Back Plate

Titan X-grade Chokes and Capacitors for Extreme Durability

Intuitive AORUS Graphics Engine

FORM FACTOR & DIMENSIONS

Form Factor ATX

Max GPU Length 287 mm

Card Dimensions (L x H) 11.30" x 5.51"

Slot Width Triple Slot

**PACKAGING** 

	Package Content			
	Accesso Graphic AORUS Driver O			
	Specifications			
	Weight	3 kg		
	Brand	Gigabyte		
	GPU Chip	GTX 1070		
	Model	GV-N1070AORUS-8GD		
	Memory Size	8 GB		
	Warranty	3 Years		
2.	Microteck max S	Series online UPS 2 KVA 72 V 1800 Watts	03	
	Model	NM72MX2KK11-IB		
	Rated Capacity 2 KVA / 1800 Watts			
	KEY FEATURES			
	Specially designed to suit Indian Power and Environment Conditions.			
	• High En	nd IGBT Based.		
	• High En	nd Micro Controller Based.		
	• Wide In	nput Voltage Range		
	• Advanc	ed PFC Technology		
	• Advanc	ed Battery Management		
	Automatic Battery Charging in UPS Off Mode			
	Short Circuit and Overload Protection			
	Smart R	RS232 Communication with monitoring software		
	• SNMP (	Card Slot (Optional)		
	Over Te	emperature Protection		

- EMI / RFI Noise Filter
- LCD/LED Display simultaneously
- Specially designed to suit Indian Power and Environment Conditions
- Generator Compatible (Supplying Sinewave Voltage)
- Isolation Transformer (Optional)
- Different Output Voltage settings.
- Output Frequency fixed at 50Hz or can be synchronized with Input Frequency.
- Static Bypass Enable or Disable.
- Outlets Programmable and Non Programmable.
- Protection from DC Fan failure.
- In-built Over Voltage Cut-Off Device.

#### ADDITIONAL INFORMATION

- 1. WEIGHT -27.400 kg
- 2. WEIGHT -27.400kg
- 3. DIMENSIONS (L W H) -560x320x460

**INPUT** 

INPUT VOLTAGE RANGE (LOAD < 50%)  $118 \sim 295 \text{ V } (\pm 5 \text{ V})$ 

INPUT VOLTAGE RANGE ((LOAD > 50%))  $160 \sim 295 \text{ V } (\pm 5 \text{ V})$ 

FREQUENCY  $40 \sim 70 \text{ HZ}$ 

PHASE SINGLE PHASE WITH GROUND

POWER FACTOR ≥ 0.99 @ FULL LOAD

OUTPUT

VOLTAGE RANGE 208 / 220 / 230 / 240 V AC

FREQUENCY RANGE (SYNCHRONIZED RANGE) 47 ~ 53 HZ OR 57 ~ 63 HZ

FREQUENCY RANGE (BATTERY MODE)	50 HZ ±	0.1 HZ OR 60HZ ± 0.1
HZ		
THD (LINEAR LOAD)		≤ 2%
THD (NON LINEAR LOAD)	≤ 4%	
OVERLOAD TO BYPASS		> 110%, 30S TURN
		MODE
		> 150% INSTANT
TURN TO		
		BYPASS
CREST FACTOR	3:1 (MA	x)
SHORT CIRCUIT PROTECTION	5 CYCLES	S TURN OFF
		INVERTER, NO
TRANSFER TO		
ALARM (AC		BYPASS, PROVIDE
ALAKIVI (AC		
TURN OFF		MODE), 5 CYCLES
		INVERTER, PROVIDE
ALARM(BATTERY MODE), INPUT		
		FUSE BLOWN OR
BREAKER		
		ACTION
WAVEFORM		PURE SINEWAVE
TRANSFER TIME		
(AC MODE TO BATTERY MODE)		
(INVERTER TO BYPASS MODE)	ZERO	
		< 4 MS
EFFICIENCY		85%~ 92%

	BATTERY					
	DC VOLTAGE	72 V(6* 7.0 AH BATTERY INSIDE)				
	CHARGE CURRENT	1.5 AMPS				
	COMMUNICATION INTERFACE	RS232,SNMP (OPTIONAL)				
	INDICATION	LCD DISPLAY				
	NOISE LEVEL SPEED	LESS THAN 50DBA @ 1 METER (WITH FAN				
		CONTROL)				
	UPS OVERLOAD / UPS SHORT-					
	CIRCUIT	110% / 300%				
	WARRANTY	ONE YEAR				
3.	Raspberry Pi 3 Model B with Cam	era Module v2	05			
	Manufacturer: Raspberry-Pi  Mfg Part No: RPI3-8MP-CAMERA-BUNDLE					
	Raspberry Pi 3 Model B Features					
	Quad Core 1.2GHz Broad	Icom BCM2837 64bit CPU				
	• 1GB RAM					
	BCM43438 WiFi and Blue	etooth Low Energy (BLE) on board				
	40-pin Extended GPIO					
	4x USB 2 ports					
	4 Pole stereo output and	I composite video port				
	Full size HDMI					
	CSI camera port for conr	CSI camera port for connecting a Raspberry Pi camera				

	DSI display port f	or connecting a F	Raspberry Pi touch screen display				
	Micro SD port fo	r loading your op	erating system and storing data				
	Upgraded switch	ed Micro USB po	wer source up to 2.5A				
	Camera Module Features	:					
	8 megapixel cam	8 megapixel camera capable of taking photographs of 3280 x 2464 pixels					
	Capture video at	1080p30, 720p6	0 and 640x480p90 resolutions				
	All software is su	pported within th	he latest version of Raspbian Operating System				
4.	Microsoft GT3-00002 Specs Item specifics		02				
	Brand	•	Microsoft				
	Model	:	Kinect				
	Туре	:	Motion SensorColor:Black				
	MPN	:	GT3-00002				
	Includes :	cludes : Kinect sensor ONLY					
	Platform :	Micros	oft Xbox One				
	UPC	:	889842105629				
	Product Key Features						
	Non-Domestic Product- Model- Platform- Color- Dimensions- Type- Connectivity- Modified Item- Dimensions	No	Xbox One - Original Microsoft Xbox One Black L 12.4 x W 9.7 x H 3.7 inches Motion Sensor Wired No				
	Weight- Width- Height-		2.13 3 7				

5.	Microsoft Xbox Kinect Adapter for Windows Product description  Experience the convenience and versatility of the Xbox One Kinect Sensor on your Xbox One S or Windows PC. Whether you want to navigate your new console without lifting a finger or develop interactive apps on PC, the Xbox Kinect Adapter will make it happen. Play games where you are the controller on Xbox One S and instantly capture screenshots or game clips. Connect to a Windows PC via USB 3.0 and craft experiences that are more natural, personal and engaging, taking advantage of the sensor's advanced skeletal tracking, enhanced noise isolation, and 1080p HD camera. With Kinect, it's your opportunity to transform entertainment, education, healthcare, and more.						
	Product information  Technical Details						
	Brand	Microsoft					
	Item Height	35.8 Centimeters					
	Item Width	8.1 Centimeters					
	Item Weight	1.2 Kg					
	Product Dimensions	16.5 x 8.1 x 35.8 cm					
	Item model number	9J7-00007					
6.	Intel LGA-1151 ATX B250 Mother	board with 19 PCI slots.	05				
	• CPU						
	Intel® Socket 1151 for 7th/6th Ge Processors	eneration Core™ i7/Core™ i5/Core™ i3/Pentium®/Celeron®					
	Supports Intel® 14 nm CPU						
	Supports Intel® Turbo Boost Tech	Supports Intel® Turbo Boost Technology 2.0					
	* The Intel® Turbo Boost Technol	ogy 2.0 support depends on the CPU types.					
	• Chipset						
	Intel® B250						

Memory

2 x DIMM, Max. 32GB, DDR4 2400/2133 MHz Non-ECC, Un-buffered Memory

Supports Intel® Extreme Memory Profile (XMP)

- \* Refer to www.asus.com for the Memory QVL (Qualified Vendors Lists).
- \* Due to Intel® chipset limitation, DDR4 2400MHz memory frequency is only supported by 7th Generation Intel® processors. Higher memory modules will run at the maximum transfer rate of DDR4 2400MHz.
- \*\* Due to Intel® chipset limitation, DDR4 2133MHz and higher memory modules on 6th Generation Intel® processors will run at the maximum transfer rate of DDR4 2133MHz.
- Graphic

Integrated Graphics Processor-Intel® HD Graphics support

VGA output support : HDMI port

- Supports HDMI with max. resolution 4096 x 2160 @ 24 Hz / 2560 x 1600 @ 60 Hz

Maximum shared memory of 1024 MB

Expansion Slots

1 x PCIe x16 (x16 mode)

18 x PCle x1

Storage

4 x SATA 6Gb/s port(s),

LAN

Intel® I219V, 1 x Gigabit LAN Controller(s)

Audio

Realtek® ALC887 8-Channel High Definition Audio CODEC

USB Ports

Intel® B250 Chipset:

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6 x USB 3.1 Gen 1 port(s) (4 at back panel, , Type-A, 2 at mid-board)
Intel® B250 Chipset:
4 x USB 2.0/1.1 port(s) (2 at back panel, , 2 at mid-board)
        Special Features
ASUS 5X Protection III:
- ASUS SafeSlot Core: Fortified PCIe Slot prevents damage
- ASUS LANGuard: Protects against LAN surges, lightning strikes and static-electricity
discharges!
- ASUS Overvoltage Protection: World-class circuit-protecting power design
- ASUS Stainless-Steel Back I/O: 3X corrosion-resistance for greater durability!
- ASUS DIGI+ VRM: 6 Phase digital power design
        Back I/O Ports
1 x PS/2 keyboard (purple)
1 x PS/2 mouse (green)
1 x HDMI
1 x LAN (RJ45) port(s)
4 x USB 3.1 Gen 1 (blue) Type-A
2 x USB 2.0
3 x Audio jack(s)
        Internal I/O Ports
1 x USB 3.1 Gen 1 connector(s) support(s) additional 2 USB 3.1 Gen 1 port(s) (19-pin)
1 x USB 2.0 connector(s) support(s) additional 2 USB 2.0 port(s)
1 x COM port(s) connector(s)
4 x SATA 6Gb/s connector(s)
```

1 x CPU Fan connector(s) (1 x 4 -pin) 1 x Chassis Fan connector(s) (1 x 4 -pin) 1 x S/PDIF out header(s) 3 x 24-pin EATX Power connector(s) 1 x 8-pin ATX 12V Power connector(s) 1 x Front panel audio connector(s) (AAFP) 1 x System panel(s) 3 x 4-pin AUXPWR Header Accessories User's manual I/O Shield 2 x SATA 6Gb/s cable(s) 1 x Supporting DVD BIOS 64 Mb Flash ROM, UEFI AMI BIOS, PnP, DMI3.0, WfM2.0, SM BIOS3.0, ACPI 6.0, ASUS EZ Flash 3, Last Modified log, F12 PrintScreen, F3 Shortcut functions and ASUS DRAM SPD (Serial Presence Detect) memory information Manageability WfM 2.0, DMI 3.0, WOL by PME, PXE **Operating System** Windows® 10 64-bit Windows® 7 64-bit \*1 Form Factor **ATX Form Factor** 

12 inch x 9.1 inch ( 30.5 cm x 23.1 cm )

7. CPU Intel 7th Generation Core i5/i7 LGA-1151

Core i5-

Intel CM8063701093302 Intel Core i5-3470 Ivy Bridge Processor 3.2GHz 5.0GT s 6MB LGA 1155 CPU OEM - OEM

05

Intel CM8063701093302 Intel Core i5-3470 Ivy Bridge Processor 3.2GHz 5.0GT/s

6MB LGA 1155 CPU

• BRAND : Intel

Technical Details

Brand Intel
Item Weight 454 g

Package Dimensions 10.2 x 10.2 x 2.5 cm Item model number CM8063701093302

Processor Socket LGA 1155

Processor Count 4

CPU Intel 7th Generation Core i7 LGA-1151

**Product Information** 

The Core i7-3770K 3.5 GHz Quad-Core processor from Intel is engineered to deliver performance and power efficiency. Compatible with PC systems, the CPU features DMI Speed - 5 GT/s bus speed and can be installed on motherboards with integrated Socket H2 slots. For a faster access to the data used most often, this 64-bit Core i7 3rd Gen. processor features an integrated L1 cache of 32 KB, 256 KB L2, and 2 MB L3 cache size. In addition, the product has the following manufacturer part number (MPN): CM8063701211700.

**Product Identifiers** 

Brand Intel

MPN CM8063701211700 UPC 5052182016855

eBay Product ID (ePID) 115980780

Product Key Features L2 Cache 256KB

Processor Type Core i7 3rd Gen.
Socket Type LGA 1155/Socket H2

Cooling Component(s) Included None/Processor only

**Additional Product Features** 

Tdp 77W

Product Type Processor

Multi-CORE Technology Quad-CORE

Processor Model CORE 17-3770k

64-Bit Computing Yes

Bus Speed Dmi SPEED-5 Gt/S MAX. Operating Temperature67.4°C

L3 Cache 2MB Level 2 Size 256KB

Type Advanced Smart Caché
Platform Compatibility PC

Architecture Features Extended Memory 64 Technology (Em64t)

Processor Quantity 1

Level 1 Size	32KB	
Manufacturing	Process 22 NM	
Compatible Slot	s 1X Processor-LGA 1155/Socket H2 Socket	
Level 3 Size	2MB	
Clock Speed	3.5GHz	

8. Corsair LPX 32 GB (2X16GB) 3200 MHz C16 DDR4 DRAM Memory Kit, Black 05

(CMK32GX4M2B3200C16)

**Product information** 

**Technical Details** 

Brand Corsair

Model CMK32GX4M2B3200C16

Model Year 2015

Item Weight 72.6 g

Product Dimensions 13.5 x 3.3 x 0.7 cm

Item model number CMK32GX4M2B3200C16

RAM Size 32 GB

Memory Storage Capacity 16 GB

Computer Memory Type DDR4 SDRAM

Digital Storage Capacity 32 GB

Voltage 1.35 Volts

Batteries Included No

Batteries Required No

Has Auto Focus No

Supports Bluetooth

Technology No

Programmable Buttons No

Item specifics

Model: CMK32GX4M2B3200C16

Capacity: 32GB (2 x 16GB) Brand: Corsair

Shipping Weight: 3.52 ounces Modified Item: No

Brand Name: Corsair MPN: CMK32GX4M2B3200C16

Item Dimensions L x W x H: 5.31 x 1.31 x 0.27 inches Capacity per Module:

16GB

Product Dimensions: 5.3 x 1.3 x 0.3 inches Number of Modules: 2

RAM: 32 GB DDR3 2133Bus Speed: PC4-25600 (DDR4-3200)

Item Weight: 2.56 ounces Form Factor: DIMM

Color: Vengeance LPX Black Number of Pins: 288

Voltage: 1.35 volts International Shipping: This item can be shipped to select

countries outside of the U.S.

Computer Memory Type: DDR4 SDRAM California residents: Click here for

Proposition 65 warning

Memory Speed: 3200 MHz

Style: 3200Mhz

**Technical Specification** 

Corsair Vengeance LPX 32GB (2x16GB) DDR4 DRAM 3200MHz C16 Memory Kit - Black

General

Bundled with Vengeance Airflow

Capacity 32 GB: 2 x 16 GB

Upgrade Type Generic

Memory

Features Dual channel, 8 Layers PCB heatspreader, anodized aluminum

heatspreader, Intel Extreme Memory Profiles (XMP 2.0),

Vengeance

LPX low profile heatspreader, unbuffered

Speed 3200 MHz (PC4-25600)

Latency Timings CL16 (16-18-18-36)

Type DRAM

Technology DDR4 SDRAM

Form Factor DIMM 288-pin

Data Integrity Check Non-ECC

Voltage 1.35 V

RAM Performance SPD - 2133 MHz - 1.2 V - CL15 - 15-15-15-36 ¦ Tested - 3200 MHz -

1.35 V - CL16 - 16-18-18-36

Miscellaneous

Colour Category Black

Manufacturer Warranty

Limited lifetime warranty

9.	Corsair RM Series™ RM850 — 850 Watt 80 PLUS® Gold Certified Fully Modular PSU 07			
	Technical Details			
	Brand Corsair			
	Form Factor	ATX12V		
	Item Height	15 Centimeters		
	Item Width	8.6 Centimeters		
	Item Weight	1.98 Kg		
	Product Dimensions	18 x 8.6 x 15 cm		
	Item model number	CP-9020093-NA		
	Number of USB 2.0 Ports	s 1		
	Voltage	230 Volts		
	Wattage	850 Watts		
	Included Components	rm850x		
	Item Specifics			
	Wattage	850 Watt		
	• Series	RMx SERIES		
	Certification	80+ GOLD		
	• Modular	FULLY MODULAR		
	PCle Connector	(6+2)4		
	SATA Connector	r 10		
	Product Description			
	Specification			
	ATX Connector	1		
	Ability to toggle single m	nultiple 12V rails No		
	ATX12V Version	v2.4		
	Continuous output rated	d temperature C 50°C		

	Continuous power W		850 Watts	
	Fan bearing technology	Rifle Be	earing	
	Fan size mm		135mm	
	MTBF hours		100,000 hours	
	Multi-GPU ready	YES		
	80 PLUS Efficiency		Gold	
	PSU Form Factor	ATX		
	Zero RPM Mode	Yes		
	Cable Type		Low-Profile, All Black	
	Dimensions		150mm x 86mm x 160mm	
	EPS Connector	2		
	Floppy Connector	2		
	Modular	Fully		
	PCI-E Connector	4		
	SATA Connector	10		
	Warranty		10 Years	
10.	D6T-44L-06 –Thermal Sensor, ME	MS, D6T S	Series with Connection Cables	10
	Product Details			
	MEMS Thermal Proximity Sensors	, Omron		
	These Omron MEMS (Micro-Electro-Mechanical-Systems) Thermal Sensors are capable of stationary human presence detection. The devices use unique ASIC technology to achieve high noise immunity and excellent signal-noise ratio. Omron's unique MEMs and ASIC technology achieve a high SNR.			
	5V operation with digital output			
	Wide field-of-view			
	Precision area thermal detection			
	Superior noise immunity with a di	gital outp	put	
	Proximity Sensors, Omron			

Part Number D6T44L06

Manufacturer Omron

Description SENSOR DIGITAL 0C-50C MODULE

Lead Free Status / RoHS Status Lead free / RoHS Compliant

Quantity Available 1680 pcs

Data sheet D6T Series CatalogD6T Datasheet

Product Photo D6T44L06.jpg

Category Sensors, Transducers

Manufacturer Standard Lead Time 23 Weeks

Detailed Description Temperature Sensor Digital, Local 0°C ~

50°C

Module

Series Automotive, AEC-Q100

Operating Temperature  $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ 

Mounting Type User Defined

Output Type I<sup>2</sup>C

Features -

Package / Case Module

Supplier Device Package Module

Resolution -

Voltage - Supply  $4.5 \text{ V} \sim 5.5 \text{ V}$ 

Sensor Type Digital, Local

Test Condition -

Sensing Temperature - Local  $0^{\circ}$ C  $\sim 50^{\circ}$ C

Sensing Temperature - Remote -

Accuracy - Highest (Lowest) -

Packaging Tray

Lead Free Status / RoHS Status Lead free / RoHS Compliant

Moisture Sensitivity Level (MSL) 1 (Unlimited)

Other Names D6T-44L-06

Z3637

Specifications

Attribute Value

Sensor Type Thermal Sensor

Switching Mode Digital

Mounting Type Surface Mount

Maximum Supply Current 5 mA

Dimensions 18 x 14 x 4.75mm

Height 4.75mm

Length 18mm

Minimum Operating Supply Voltage 4.5 V dc

Width 14mm

Maximum Operating Supply Voltage 5.5 V dc

Minimum Operating Temperature 0 °C

Maximum Operating Temperature +50 °C

## (TO BE SUBMITTED ALONG WITH TECHNICAL BID)

TENDER NOTIFICATION NO:		
		Phone No:- 27871018
<u>UNDERT A</u>	<u> KING</u>	
The Registrar, Delhi Technological University, Bawana Road, Delhi-110042  We the undersigned (herein after called as to execute supply of items as per specification aga which this tender may be accepted at the rates states set forth for such items as may be ordered by the officer acting on his behalf.	inst which we had there in and su	ave quoted over rates and for bject to the terms & conditions
	D. d.	D (
		Day of
	_	intractor

#### Guidelines/Procedure to be followed in introduction of 'e'-procurement solution:

- **1.** Payment of cost of Tender documents: The collection of cost of Tender documents is dispensed away with, as there is no physical supply of tender documents and also to have absolute anonymity of bidder participating in e-procurement solution. The bidders can view/download the tender documents from the: <a href="https://govtprocurement.delhi.gov.in">https://govtprocurement.delhi.gov.in</a>.
- **2.Submission of bids**: The bidders who are desirous of participating in 'e' procurement shall submit their price bids in the standard formats prescribed in the Tender documents, displayed at : https://govtprocurement.delhi.gov.in. The bidder should upload the scanned copies of all the relevant certificates, documents etc. in the: https://govtprocurement.delhi.gov.in. in support of their price bids. The bidder shall sign on all the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity and copies thereof may also be submitted in the office of the Assistant Registrar(S&P), DTU along with original EMD before the specified date & time. In the event of the specified date for physical submission of EMD along with copies of bid documents is declared a holiday, the same will be received up to the appointed time on the very next working day. However, documents of the bidders downloaded online or requisitioned subsequently only will form the basis for deciding the tender. 3. Payment of Bid Security (Earnest Money Deposit): The EMD shall be in the form of the DD/BG/Fixed Deposit Receipt only of a scheduled bank issued in favour of Registrar, Delhi Technological University, Delhi and the zerox copy thereof is to be scanned and uploaded along with the bid, and the original shall be sent to DTU so as to reach before the date & time of closing of the bids; failing which bid will be rejected. The Bid Security (EMD) of unsuccessful bidders will be discharged immediately after finalization of the order/contract without any interest. However, firms registered with NSIC etc., are exempted from submitting EMD provided such registration includes the item(s) they are offering are manufactured by them and not for selling products manufactured by other companies.
- **4.Price Bid Opening**: The Price Bids of only technically qualified bidders (whose bids satisfy the prescribed technical specifications/parameters and have also submitted all requisitioned documents & EMD) will be opened online at the specified date & time and will subsequently be evaluated to determine the lowest bidder. The result will be displayed on the: <a href="https://govtprocurement.delhi.gov.in">https://govtprocurement.delhi.gov.in</a>. which can be seen by all the bidders who participated in the tenders. There shall not be any negotiation normally. However, in exceptional cases, negotiations can be held with the lowest evaluated responsive bidder only. Counter offers tantamount to negotiations and shall be treated at par with negotiations.
- **5.**<u>Processing of Tenders</u>: The concerned officer/officers will evaluate and process the tenders as done in the conventional tenders and will communicate the decision to the bidder online.
- **6.Payment of Performance Security**: The successful tenderer shall furnish a Bank Guarantee/FDR of the value of 05% of the basic cost of the item for a period of 60 days beyond the warranty period from a nationalized bank to ensure the satisfactory performance of item supplied. The performance guarantee is to be submitted at the time of installation / demonstration of equipments. In case the performance of the item is not found satisfactory, the amount of Performance Security will be forfeited & credited in university account.
- 7. <u>Participation of Bidders at the time of opening of bids</u>: Bidders have two options to participate in tendering process at the time of opening of Bids:
- (i). Bidders can come at the place of opening of bids (electronically) as done in the conventional tender process.
- (ii). Bidders can visualize the process online.
- **8.**Participation Financial Rules for e-procurement: The e-procurement system would be applicable for purchase of goods, outsourcing of services and execution of work as prescribed in GFRs.

ASSISTANT REGISTRAR(S&P) DELHI TECHNOLOGICAL UNIVERSITY, SHAHBAD DAULATPUR, BAWANA ROAD,DELHI – 110 042

#### TERMS AND CONDITIONS

<u>Procedure for submission of bids</u>: The bidders who are desirous of participating in 'e'-procurement shall submit their technical and price bids in the standard formats prescribed in the Tender documents, displayed at: <a href="https://govtprocurement.delhi.gov.in">https://govtprocurement.delhi.gov.in</a>. The bidder should upload the scanned copies of all the relevant certificates, documents etc. after page-numbering all documents and tender document and prepare an index thereof in the: <a href="https://govtprocurement.delhi.gov.in">https://govtprocurement.delhi.gov.in</a>. in support of their price bids. The bidder shall sign on all the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity and copies thereof may also be submitted in the office of the Assistant Registrar(S&P), DTU along with original EMD. However, documents of the bidders downloaded online or requisitioned subsequently only will form the basis for deciding the tender.

1. Manufacturers (OEMs) only should submit their bids. In case an OEM participate through its authorized dealer or dealers, the OEM has to be explicitly certified that it does not sell products directly and participates in tendering process through its authorized dealer only. The OEM is required to submit a list of its authorized dealers.

#### 2. <u>ALTERATION IN THE SPECIFICATION</u>.

(i) The specifications mentioned/issued with this form of tender must not be altered by the Suppliers.

#### 3. INCOMPLETE TENDERS

- 4. The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information/documents, as asked for in the NIT, or submission of a bid not substantially responsive to the NIT in every respect, will be at the Bidder's risk and may result in rejection of its bid.
- 5. <u>CANCELLATION OF TENDER/ CONTRACT/ IN PART OR IN FULL IN CASE OF DEFAULT IN CONTRACT/SUPPLY:</u>
  - If the Supplier, in the opinion of the Institute, fails or neglects to comply with any of the terms & conditions forming, part of the order issued, the head of institute shall without prejudice to any other right or remedies under the contract, has the right to cancel the contract / order by giving 15 days notice in writing to the Suppliers/firms without being liable to pay compensation for such cancellation.
- 6. Tender shall be uploaded as per guidelines indicated for e-procurement solution.
- 7. Demonstration of equipments has to be arranged by the suppliers, if desired by the institute. The technical committee may visit production facility if so desired for sample verification.
- 8. The quotation should be valid for a period of one year from the date of opening of the tender.
- 9. Rates are to be quoted in INR (Rupee terms) only and any revision thereof is not allowed after the tenders have been opened.
- 10. The delivery period should be clearly mentioned against each item, incase, the items are not readily available, ex-stock offer will be preferred.
- 11. Rates should be quoted F.O.R Institution. Taxes and Duties namely GST/Custom Duty (against Custom Duty Exemption Certificate)/Excise Duty should be mentioned clearly.
- 12. Consignment will not be insured at the Institute/University Cost.
- 13. Bidder, if is not the Original Equipment Manufacturer (OEM), must submit OEM's or their Distributor's Authorization to quote/sell the product(s). Preference will be given to

quotation pertaining to indigenous products. However, where suitable substitutes are not available and item need to be imported the following clarification/information should be given.

- Whether the item will be imported by the intended tenderers against its own import license or university will have to provide Custom Duty Exemption Certificate (CDEC).
- o Name and address of the foreign supplier, make & model of the offered product and authorization to sell from OEM or their Distributor/Authorized Chanel Partner.
- Delivery period including information about mode of dispatch and possible duration (after dispatch) for receipt of item at the port.
- Whether the item required any special preparation for installation. In case yes, full details should be given regarding operation maintenance of the items.
- o In case of costly/sophisticated items whether the tenderers will arrange any special training regarding operation / maintenance of the items.
- o Nature of assurance for the supply of spares after the warranty period.
- 14. The payment will be made within 30 days after the successful demonstration/installation of the equipment and fulfilling of other obligations (like training etc., if any) as per the purchase/work order, against a Bill/Invoice; containing therein details of goods delivered/services performed. Rejected items/goods should also be removed within 30 days after which no responsibility will be accepted by University.
- 15. In the event of the item(s) being imported product(s), Custom Duty Exemption Certificate (CDEC) will be issued by the University on the written request of the supplier; who, in turn, will furnish copies of relevant Customs Related Documents namely Airways Bill, Packing List, TR-6 challan etc. along with Bill/Invoice.
- 16. Conditional quotations and/or incomplete quotations in any respect will be rejected.
- 17. In case you cannot quote for one or more of the items asked for in the tender the word "NOT QUOTED" (in the rate column) should be indicated.
- 18. The specification of the item quoted by the firm should confirm to the University specifications. Confirmation, in this respect should be specifically mentioned in the tender. Where the tenderer feels that the specification of the item not fully given or differ, from the specification of the item mentioned by the university, the exact specification of such item should be attached with the tender indicating the item quoted.
- 19. The Firm is required to link the University specifications with catalogues & leaflets/literature and also <u>mention Make and the Model for each item</u>. Detailed features, for compliance of specification should be provided on specification sheet & appropriate reference i.e. page no. & para of literature, leaflet wherefrom the relevant information has been checked, should be indicated.
- 20. **EARNEST MONEY:-** EMD should be attached with the technical bid. The EMD shall be in the form of the **DD/BG/Fixed Deposit Receipt** of a scheduled bank issued in favour of Registrar, Delhi Technological University, Delhi. Zerox copy thereof is to be scanned and uploaded along with the bid, and the original instruments shall be sent to DTU so as to reach before the date of closing of the bids. Failure to furnish the original instrument before the closing of the bid, will entail rejection of bid and blacklisting. **If the tenderer after acceptance of the tender refused to take up the purchase order, his Earnest Money will be forfeited**. Any tender received without / less Earnest Money deposit shall be summarily rejected.
- 21. The Purchase Order/Contract will be awarded to the successful Bidder whose bid has been determined to be responsive and has been determined to be the lowest evaluated bid,

- provided further the Bidder is determined to be qualified to execute the Order/Contract satisfactorily.
- 22. There shall not be any negotiation normally. However, in exceptional cases, negotiations can be held with the lowest evaluated responsive bidder only. Counter offers tantamount to negotiations and shall be treated at par with negotiations.
- 23. The Competent Authority reserves the right to reject any or all the tenders and annual the bidding process at any time prior to award of Contract, without assigning any reason, without thereby incurring any liability to the affected Bidder or Bidders, and his decision will be final.
- 24. The supplies shall have to be made within the period specified in the purchase order failing which the order shall be cancelled and the Earnest Money will be forfeited. However, in exceptional circumstance and, on written request, from the supplier/tenderer, extension of date for supply of the material will be considered. Extension in supply period is at the sole discretion of the competent authority.
- 25. Service manuals, wherever available/ required, should be provided along-with the Equipments.
- 26. The University reserves the right at the time of award of PO/Contract to increase or decrease the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions. Further, the quantities in the PO/Contract may be enhanced by 30% within the delivery period.
- 27. In the case of purchase of many items against one tender, which are not inter-dependent or where compatibility is not a consideration, comparison would be made on the basis of prices quoted by the firms for identifying the lowest quoting for each item.
- 28. WARRANTY: (As per specification) A Warranty Certificate should invariably be supplied along with the item at the time of delivery. If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the supplier shall rectify the defects, errors or omissions by repair or by partial or complete replacement on free of cost basis.
- 29. The Competent Authority reserves the right to levy liquidated damages up to 2% of the value of the order for delayed supply. If the supply is delayed beyond the extended period, the University reserves the right even to cancel the order and forfeit the EMD of the firm/tenderer.
- 30. PERFOMANCE SECURITY DEPOSIT:- The successful tenderer shall furnish Performance Security Deposit of the value of <u>05%</u> of the basic cost of the item in the shape of Bank Guarantee/FDR from a nationalized bank pledged to Registrar, DTU, for a period of 60 days beyond the warranty period to ensure the satisfactory performance of item supplied. The performance guarantee is to be submitted at the time of installation / demonstration of equipments. In case the performance of the item is not found satisfactory and/or the Supplier fails to complete its obligation under the contract/purchase order, the amount of Performance Security will be credited in University account.
- 31. DEFAULT: In the event of default and unsatisfactory service of the contractor/Supplier firm, the DTU will be at liberty to repair/get the item serviced from other party at the cost of supplier/ contractor/ tenderer.
- 32. In case of software items, the suppliers should ensure that:
  - o Legal software is supplied in original sealed pouches / P. K. T.
  - o A license agreement is enclosed with it.
  - o A registration card is available for software.

- 33. FAILURE AND TERMINATION: If the Contractor / Supplier fails to deliver the stores or any installment thereof within the period fixed for such delivery or at any time repudiates the contract before the expiry of such period, DTU may without prejudice to the right of the purchaser recover damages for breach of the contract.
- 34. The technical & financial bids of only those bidders will be opened who fulfill the eligibility criteria and whose documents are found in order. If any of the date earmarked for opening of technical or financial bids happens to be a holiday, the bids will be opened on the very next working day.
- 35. Terms & conditions for Comprehensive Annual Maintenance Contract (CAMC) will be as per Annexure -1(Not applicable)
- 36. Notwithstanding the provisions relating to extension of time, penalty and cancellation of tender/contract for default, the vendor shall not be liable for forfeiture of its performance security/ liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure (i.e. an event or situation beyond the control of the vendor that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the vendor; such as wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes etc.). If the performance in whole or in part or any obligation under the contract is prevented or delayed by any reason of force-majeure for a period exceeding 60 days, either party may at its option terminate the contract by sending a written notice without any financial repercussions on either side.
- 37. For any query/clarification in r/o technical aspect of the enquiry, **HOD**, **Information Technology**, **DTU** may be contacted.
- 38. Proof of GST Registration no. and VAT /GST Return copy of fourth quarter for last three financial years from the date of opening of tender bid.
- 39. PAN No (Copy PAN no. Attached)
- 40. Purchase Order (PO) copies having executed similar items (3 POs of 80% each or 5 POs of 60% each of estimated cost of items) in the name of bidder of last three financial years from the date of opening of tender bid.
- 41. Authorization certificate from Original Equipment Manufacturer (OEM) or their Distributor to quote/sell the product, in case the bidder is not the OEM.
- 42. Disputes, if any, arising out of this tender shall be subject to exclusive jurisdiction of Courts of Delhi/New Delhi only.
- 43. The bidder submit an undertaking in firm letter pad that it has not been blacklisted by any Govt./Instt/autonomous body.
- 44. The OEM is required to submit a list of its authorized dealers, if not participating directly in the tender.

ASSISTANT REGISTRAR(S&P)
DELHI TECHNOLOGICAL UNIVERSITY,
SHAHBAD DAULATPUR, BAWANA ROAD,DELHI – 110 042

### CHECK LIST OF DOCUMENTS TO BE SENT WITH TECHNICAL BID.

S.No.	Particulars of documents	Page	No. of
		no.	pages
1.	Proof of EMD (mention amount with instrument number and date)		
2.	Proof of PAN no. (mention no)		
3.	Proof of GST Registration No and VAT/GST Return copy of fourth		
	quarter (January to March) for last three financial year from the date of opening of tender bid		
4.	Brochure/Leaflets/Technical Information, including Make & Model, Imported/Indian of the item(s)		
5.	UNDERTAKING as per page no. 22 of Tender Document, duly signed.		
6.	Technical specifications, terms & conditions and delivery period etc. to be submitted on firm's letter head		
7.	Warranty Certificate from manufacturer or authorized dealer of manufacturer		
8.	Purchase Order (PO) copies having executed similar items (3 POs of 80% each or 5 POs of 60% each of estimated cost of items) in the name of bidder of last three financial year from the date of opening of tender bid.		
9.	Authorization Certificate from Original Equipment Manufacturer		
	(OEM) or their Distributor to quote / sell the product, in case the bidder is not the OEM.		
10.	The bidder has submit an undertaking in firm letter pad that it has not been blacklisted by any Govt./Instt/autonomous body.		
11.	The OEM is required to submit a list of its authorized dealers, if not participating directly in the tender		

Note: All copies of above documents should be duly signed and stamped by the tenderer before uploading.

Signature of tenderer:	 	 			 	
Name:	 	 			 	
Name of firm:	 	 			 	 
Гelephone No	 	 	 			

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S.No.	Particulars of documents	No. of pages

Pagination must be completed properly .