

Enquiry No. IIITDMJ/P&S/Enq./03

Date: 28-04-2015

Sub: Invitation of Tender/Quotation for the Supply of followings items:

- a) High-definition camera for extreme-action video & Photography(01 No.) Annexure 1
- b) Motion sensor device for gesture recognition (with Adapter for Windows) (02 Nos.) Annexure 2
- c) Motion sensor device for hand and finger motions(with VR Developer Mount) (02 Nos.) Annexure 3
- d) Entry-level DSLR(with lens) (02 Nos.) Annexure 4
- e) Mid-Range DSLR(with prime lens (01 No.) Annexure 5
- f) Point and Shoot Camera (02 Nos.) Annexure 6

Sealed Tenders are invited by the Registrar, PDPM Indian Institute of Information Technology, Design & Manufacturing Jabalpur for Supply of following items:

- a) High-definition camera for extreme-action video & Photography(01 No.) Annexure 1
- b) Motion sensor device for gesture recognition (with Adapter for Windows) (02 Nos.) Annexure 2
- c) Motion sensor device for hand and finger motions(with VR Developer Mount) (02 Nos.) Annexure 3
- d) Entry-level DSLR(with lens) (02 Nos.) Annexure 4
- e) Mid-Range DSLR(with prime lens (01 No.) Annexure 5
- f) Point and Shoot Camera (02 Nos.) Annexure 6

The tender No., closing and opening date of received quotations are as follows:

Tender No. IIITDMJ/P&S/Enq/03	Dated : 28- 04-2015
Closing Date & Time: 12.05.2015 at 3.00 PM	
Date & Time of opening of Tender: 12.05.2015 at 4.00 PM	

General Terms and Conditions:

1. Sealed pack quotations are invited from original manufacturers or their authorized dealers having distributorship and service center.
2. **The bid: should be in two parts:**
(a) **Techno Commercial Bid:** Consisting of technical details & prices complying with the required technical specifications mentioned in Annexures.

(b) **EMD:** The bidder must submit the EMD (bid security). If the EMD is not found valid in terms of amount and period-wise or otherwise, quotation of the bidder will stand invalid.

The quotation and EMD should be sealed by the bidder in a cover duly super scribed.

3. **Rates:-** Rates quoted should be in Indian Rupees(INR) on FOR destination at PDPM-IIITDM, Jabalpur on **DOOR Delivery basis**, inclusive of all the charges, with break up as:-

- (i) Basic cost
- (ii) Installation charges (if any)
- (iii) VAT/CST as applicable
- (iv) Total FOR at IIIT, Jabalpur

Note:- If the breakup is not given, it will be assumed that the quoted rates include all admissible taxes, transportation charges and installation charges. VAT will be deducted at source as per Madhya Pradesh VAT Act.

4. PDPM-IIITDM, Jabalpur is registered with DSIR, Govt. of India(Custom Duty Notification No. 51/96-Custom dt:- 23rd July 1996 and Central Excise Duty Notification no. 10/97-Central Excise Dt: 1st March 1997) and it therefore, exempted from Excise Duty and partial exempted from Custom duty. Exemption certificate of the same shall be issued, to successful bidder if needed.
5. Payment will be released 90% on delivery and 10% against satisfactory installation/ inspection report.
6. **Only one specific model/make of the quoted item satisfying complete technical specifications should be mentioned. No option should be given. Quoting of options will lead to disqualification.**
7. The quantity given is tentative and Institute reserves the right to change the quantity as per its requirement at any stage. Further, the Institute reserves the right to place order either of all the items or only some of the above items. The supplier shall have no right to claim any compensation in such case. Bidder may quote any or all of the items.
8. The supplier is to submit earnest money deposit (EMD) of Rs. 7,000/- (Rupees Seven thousand only) with their sealed quotation. Quotation without earnest money deposit shall be summarily rejected.
9. The earnest money deposit(EMD) should be in the form of Demand Draft/FDR in favour of PDPM-IIITDM payable at Jabalpur. The EMD should remain valid for a period of 45 days beyond the final tender validity period.

10. Validity of quotation should be minimum 90 days from the date of opening of quotation. The overall offer for the assignment and tenderer(s) quoted price shall remain unchanged during the period of validity. If the tenderer quotes the validity shorter than the required period, the same shall be treated as unresponsive and it may be rejected.
11. In case the tenderer withdraws, modifies or change his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required without changing any terms and conditions etc. of their original tender.
12. The bidder shall submit one copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the of the tender enquiry document.
13. Conditional bid will be treated as unresponsive and it may be rejected.
14. In case the supplied item(s) has deviation(s), and is/are accepted by the Institute, amount proportionate to deviation as decided by the Institute would be deducted. In case it is found at a later stage that the items internal structure/specification do not conform with the specification in the tender document, bank guarantee will be forfeited and the firm/supplier will be liable to be blacklisted for participating in future tender process for at least one year.
15. **Delivery Period :** Delivery of all the items should be completed within 4 weeks from the date of receipt of firm order. **No other delivery period longer than that given by the Institute will be accepted and if quoted by the tenderer will lead to technical disqualification of the firm.**
16. **Penalty for delayed Delivery:**
In the event of delayed delivery, Installation & Commissioning i.e. after the expiry of the period as mentioned in P.O., the vendor shall be liable for a penalty deduction at a percentage of the value of the undelivered equipment subject to a maximum of 7.5% as detailed below:
 - @ 1% up to one week;
 - @ 2.5% up to two weeks;
 - @ 5% up to three weeks;
 - @ 7.5% for four weeks and aboveFor the purpose of this clause, part of the week is considered as a full week.

17. The quotations should be completed in all respects and cover the cost for the materials of the exact specification and descriptions of the stores as per the annexure, otherwise the same shall be ignored.
18. **Authorization Certificate:** The authorized dealer/agent/distributor has to submit valid authorized Agent/Dealership Certificate issued by their principal.
19. **Warranty/Guarantee:** Bid should be quoted with one(01) year comprehensive on-site warranty/guarantee as per specification of the respective items in the annexures and will start from the date of satisfactory installation/commissioning, against any defect of manufacturing, workmanship and poor quality of components supplied items. During warranty/guarantee period the purchaser will not bear the cost of the item (s), which may come as replacement of the original stores or spares as a result of faults noticed at the time of inspection during the warranty period. The Seller/Local Agent is required to eliminate the fault(s) occurring during the Warranty period without delay by improvement or replacement as may be necessary, at their own cost. During warrantee period, the supplier should ensure a maximum downtime of 72 hours from the date/time of the complaint lodge about the item. The supplier must provide after sales service facility on site during warrantee period.
20. **Performance Bank Guarantee:** During Warranty Period supplier has to submit PBG @ 5% of the total cost of the items supplied in the form of Bank Gurarantee/FDR payable at Jabalpur. PBG will be valid for a period of 60 days beyond the date of completion of warrantee.
21. **Inspection & Testing:** Goods will be inspected by the purchaser at his end. Goods rejected on inspection will be replaced by the supplier of cost and all charges for collection and delivery of the same to the Purchaser will be on suppliers account.
22. **Director, PDPM-IIITDM, Jabalpur** reserves the rights to himself/herself to alter/modify the order at any stage and or to reject any offer without assigning any reason thereof and he is not bound to accept the lowest tender.
23. Any attempt of negotiations direct or indirect on the part of the tenderer with authority to whom he has submitted the tender unless called by the competent authority or any endeavor to secure any interest for an actual or prospective tenderer or to influence by any means, the acceptance of particular tender will render the tender liable to exclusion form consideration.

24. **Eligibility Criteria:** A bidder must have proven track record in supplying the specified items/similar items to the educational institutions/reputed organizations and should be financially sound and should have own showroom & service centre.
25. The Institute reserves the right to reject any or all bids without specifying any reasons thereof.
26. All disputes/arbitration should be within the jurisdiction of Jabalpur
27. Kindly enclose pamphlet/brochure of the company along with the quotation showing complete details, technical specifications and quality of the items.
28. Sealed quotation, mentioning "Tender No. IIITDMJ/P&S/Enq./03" at the top of the envelop, should reach on or before 3.00 PM on 12.05.2015 to the Registrar PDPM-IIITDM Jabalpur, Dumna Airport Road, Post: Khamaria, Jabalpur (M.P.) Pin-482005.
29. Techno Commercial bid will be opened at **4.00 PM** same day (**12.05.2015**). In case of holiday, technical commercial bid will be opened at the same time on next working day.



Rizwan Ahmed
Assistant Registrar (P&S)

1. High-definition camera for extreme-action video & photography

(with:
 Rechargeable Battery
 Mount-head Strap
 Mount-Chest Harness
 Mount-Suction Cups
 Mount-Jaws-Flex Clamp
 Micro-SD card-64 GB)

Technical Specifications:

Weight

Camera: 84g

Camera with housing: 147g

Video Mode

Video Resolutions

Video Resolution	Frames Per Second (fps) NTSC/PAL	Field of View (FOV)	Screen Resolution
4K	15, 12.5	Ultra Wide	3840x2160
2.7K	30, 25, 24	Ultra Wide, Medium	2704x1520
1440p	48, 30, 25, 24	Ultra Wide	1920x1440
1080p	60, 50, 48, 30, 25, 24	Ultra Wide, Medium, Narrow	1920x1080
1080p SuperView	60, 50, 48, 30, 25, 24	Ultra Wide	1920x1080
960p	100, 60, 50	Ultra Wide	1280x960
720p	120, 60, 50, 30, 25	Ultra Wide, Medium, Narrow	1280x720
720p SuperView	100, 60, 50	Ultra Wide	1280x720

WVGA

240

Ultra Wide

848x480

Video FormatH.264 codec, .mp4 file format

Time Lapse Video

Automatically creates video from frames captured at set intervals. Available only in 4K and 2.7K 4:3 resolutions. (2.7K 4:3 is available only for Time Lapse Video.)

Time Lapse Video Intervals0.5, 1, 2, 5, 10, 30 and 60 seconds

Video + Photo

Record video and capture Time Lapse photos at the same time. Available intervals are 5, 10, 30 and 60 seconds.

Video Resolution	Video Frames per Second (fps)	Video FOV
1440p	24	Ultra Wide
1080p	30, 25, 24	Ultra Wide, Medium, Narrow
720p	60, 50, 30, 25	Ultra Wide, Medium, Narrow ²

Looping

Record a continuous video loop that overwrites itself until you press the shutter button to stop it and save.

Advanced Video Capture Settings**SuperView**

SuperView video mode captures the world's most immersive wide-angle perspective. It allows you to capture more of yourself and your surroundings in the shot, and it provides full widescreen playback.

SuperView Settings

SuperView Mode	Video Resolution
1080p SuperView	1920 x 1080
720p SuperView	1280 x 720

Auto Low Light

Auto Low Light mode automatically adjusts frame rates according to lighting conditions for enhanced low-light performance. Frame rates are adjusted in medium- and low-light conditions. Playback occurs at the selected resolution and frame rate.

Photo Mode

Photo Resolutions*

Resolution	Field of View (FOV)	Screen Resolution
12MP (Default)	Wide	4000 x 3000
7MP	Wide, Medium	3000 x 2250
5MP	Medium	2560 x 1920

Continuous Photo (up to 30 seconds)

Hold down the shutter button to continuously capture a series of photos until shutter button is released.

Continuous Interval

3 photos/1 second (Default)

5 photos/1 second

10 photos/1 second

Night Photo

Capture a single photo with a customizable exposure time of up to 30 seconds.

Shutter

Applies only to Night Photo and Night Lapse and determines the amount of time that the shutter is open.

Shutter Setting

Description

Auto (Default)

Up to 2 seconds

Fixed

2, 5, 10, 15, 20 or 30 seconds

Multi-Shot Mode

Photo Resolutions

Resolution	Field of View (FOV)	Screen Resolution
12MP (Default)	Wide	4000 x 3000
7MP	Wide, Medium	3000 x 2250



5MP

Medium

2560 x 1920

Burst

Capture up to 30 photos per second.

Burst Rate

30 photos/1 second (Default), 30 photos/2 seconds, 30 photos/3 seconds, 30 photos/6 seconds¹

10 photos/1 second, 10 photos/2 seconds, 10 photos/3 seconds

5 photos/1 second

3 photos/1 second

Time Lapse

Automatically capture a series of photos at timed intervals.

Time Lapse Photo Intervals

0.5, 1, 2, 5, 10, 30 and 60 seconds

Night Lapse

Capture a series of photos at specific intervals and exposure times.

Night Lapse Photo Intervals

15, 20, 30 and 60 seconds

2, 5, 30 and 60 minutes

Shutter

Applies only to Night Photo and Night Lapse and determines the amount of time that the shutter is open.

Shutter Setting

Description

Auto (Default)

Up to 2 seconds

Fixed

2, 5, 10, 15, 20 or 30 seconds

Advanced Video and Photo Capture Settings

Protune

Protune unlocks the camera's full potential, delivering minimally compressed, cinema-caliber video optimized for professional productions, and advanced manual controls for photos and video. Flex your creativity with customizable settings for Color, ISO Limit, White Balance, Sharpness and Exposure—and enjoy the greatest degree of manual control available in a GoPro camera.

- Captures images with less compression, giving content creators higher quality for professional productions.
- Protune enables manual control of **White Balance, Color, ISO Limit, Sharpness, Shutter and Exposure Value Compensation** for advanced control and customization of your videos and photos.
- Protune is available for all video and photo resolutions.



2. Motion sensor device for gesture recognition (with Adapter for Windows)

Technical Specifications

Viewing angle	43° vertical by 57° horizontal field of view
Vertical tilt range	±27°
Frame rate (depth and color stream)	30 frames per second (FPS)
Audio format	16-kHz, 24-bit mono pulse code modulation (PCM)
Audio input characteristics	A four-microphone array with 24-bit analog-to-digital converter (ADC) and Kinect-resident signal processing including acoustic echo cancellation and noise suppression
Accelerometer characteristics	A 2G/4G/8G accelerometer configured for the 2G range, with a 1° accuracy upper limit.

3. Motion sensor device for hand and finger motions (with VR Developer Mount)

Technical Specifications

Height	Width	Depth	Weight
13 mm	13 mm	76 mm	45 grams

Included Cables

24" and 60" USB 2.0 (microUSB 3.0 connectors)

Minimum System Requirements

Windows 7 or 8 or Mac OS X 10.7 Lion

AMD Phenom™ II or Intel® Core™ i3, i5, i7 processor

2 GB RAM

USB 2.0 port

Internet connection

4. Entry-level DSLR (with lens)

Technical Specifications

Body type

Body type Compact SLR

Sensor

Max resolution 5184 x 3456
 Other resolutions 3456 x 2304, 2592 x 1728
 Image ratio w:h 3:2
 Effective pixels 18 megapixels
 Sensor photo detectors 19 megapixels
 Sensor size APS-C (22.3 x 14.9 mm)
 Sensor type CMOS
 Processor Digic 4

Image

ISO Auto, 100, 200, 400, 800, 1600, 3200, 6400
 White balance presets 6
 Custom white balance Yes
 Image stabilization No
 Uncompressed format RAW
 JPEG quality levels Fine, Normal

Optics & Focus

Autofocus

- Contrast Detect (sensor)
- Phase Detect
- Multi-area
- Selective single-point
- Single
- Continuous
- Face Detection
- Live View

Digital zoom No
 Manual focus Yes
 Number of focus points 9
 Lens mount Canon EF/EF-S
 Focal length multiplier 1.6x

Screen / viewfinder

Articulated LCD Fixed
 Screen size 3"
 Screen dots 460,000
 Touch screen No
 Screen type TFT color LCD, liquid-crystal monitor
 Live view Yes
 Viewfinder type Optical (pentamirror)
 Viewfinder coverage 95%
 Viewfinder magnification 0.8x

Photography features

Minimum shutter speed 30 sec
 Maximum shutter speed 1/4000 sec
 Aperture priority Yes

Shutter priority	Yes
Manual exposure mode	Yes
Subject / scene modes	Yes
Built-in flash	Yes (Pop-up)
Flash range	9.20 m (at ISO 100)
External flash	Yes (Hot-shoe, E-TTL II)
Flash modes	Auto, On, Off, Red-eye
Continuous drive	3.0 fps
Self-timer	Yes (10 sec (2 sec with mirror lock-up))
Metering modes	<ul style="list-style-type: none"> • Multi • Center-weighted • Partial
Exposure compensation	±5 (at 1/3 EV, 1/2 EV steps)
AE Bracketing	±2 (3 frames at 1/3 EV, 1/2 EV steps)
WB Bracketing	Yes (3 images at -/+ 3 steps)

Videography features

Resolutions	1920 x 1080 (30, 25 fps)
Format	H.264
Microphone	Mono
Speaker	Mono

Storage

Storage types	SD/SDHC/SDXC card
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Connectivity

USB	USB 2.0 (480 Mbit/sec)
HDMI	Yes (mini-HDMI)
Microphone port	No
Headphone port	No
Remote control	Yes (E3 connector)

Physical

Environmentally sealed	No
Battery	Battery Pack
Battery description	Lithium-Ion LP-E10 rechargeable battery & charger
Battery Life (CIPA)	500
Weight (inc. batteries)	480 g (1.06 lb / 16.93 oz)
Dimensions	130 x 100 x 78 mm (5.12 x 3.94 x 3.07")

Other features

Orientation sensor	Yes
Timelapse recording	Yes (by USB cable and PC)
GPS	None

5. Mid-Range DSLR (with prime lens)

Technical Specifications

Body type

Body type Mid-size SLR

Sensor

Max resolution 5472 x 3648
 Other resolutions 3468x2432, 2736x1824, 1920x1280, 720x480, 4864x3648, 3248x2432, 2432x1824, 1696x1280, 640x480, 5472x3072, 3468x2048, 2736x1536, 1920x1080, 720x408, 3648x3648, 2432x2432, 1824x1824, 1280x1280, 480x480
 Image ratio w:h 1:1, 4:3, 3:2, 16:9
 Effective pixels 20 megapixels
 Sensor photo detectors 21 megapixels
 Sensor size APS-C (22.5 x 15 mm)
 Sensor type CMOS
 Processor Digic 5+
 Color space sRGB, Adobe RGB

Image

ISO Auto, 100, 200, 400, 800, 1600, 3200, 6400, 12800 (25600 with boost)
 White balance presets 6
 Custom white balance Yes
 Image stabilization No
 Uncompressed format RAW
 JPEG quality levels Fine, Normal
 File format JPEG: Fine, Normal.
 RAW: RAW, M-RAW, S-RAW (14bit)

Optics & Focus

Autofocus Contrast Detect (sensor)
 Phase Detect
 Multi-area
 Center
 Selective single-point
 Tracking
 Single
 Continuous
 Touch
 Face Detection
 Live View
 Autofocus assist lamp Intermittent firing of built-in flash
 Manual focus Yes
 Number of focus points 19
 Lens mount Canon EF/EF-S
 Focal length multiplier 1.6x

Screen / viewfinder

Articulated LCD Fully articulated
 Screen size 3"
 Screen dots 1,040,000
 Touch screen Yes
 Screen type Clear View II TFT color LCD

Live view	Yes
Viewfinder type	Optical (pentaprism)
Viewfinder coverage	98%
Viewfinder magnification	0.95×

Photography features

Minimum shutter speed	30 sec
Maximum shutter speed	1/8000 sec
Scene modes	Portrait, Landscape, Close-up, Sports, Night Portrait, Handheld Night Scene, HDR Backlight Control

Built-in flash	Yes (Pop-up)
Flash range	12.00 m
External flash	Yes (Built-in flash works as wireless commander)
Flash modes	Auto, On, Off, Red-eye
Flash X sync speed	1/250 sec
Drive modes	Single, Continuous L, Continuous H, Self timer (2s+remote, 10s +remote), Silent single shooting, Silent continuous shooting

Continuous drive	7.0 fps
Self-timer	Yes (2 or 10 sec, remote)
Metering modes	Multi Center-weighted Spot Partial
Exposure compensation	±5 (at 1/3 EV, 1/2 EV steps)
AE Bracketing	±3 (2, 3, 5, 7 frames at 1/3 EV, 1/2 EV steps)
WB Bracketing	Yes (3 frames in either blue/amber or magenta/green axis)

Videography features

Resolutions	1920 x 1080 (29.97, 25, 23.976 fps), 1280 x 720 (59.94, 50 fps), 640 x 480 (59.94, 50 fps)
Format	H.264
Microphone	Stereo
Speaker	Mono

Storage

Storage types	SD/SDHC/SDXC
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Connectivity

USB	USB 2.0 (480 Mbit/sec)
HDMI	Yes (HDMI mini)
Wireless	Built-In
Remote control	Yes (RS-60E3 cable release, RC-6 wireless remote, or using smartphone over Wi-Fi)

Physical

Environmentally sealed	Yes (Water and Dust resistant)
Battery	Battery Pack
Battery description	Lithium-Ion LP-E6 rechargeable battery & charger
Battery Life (CIPA)	920
Weight (inc. batteries)	755 g (1.66 lb / 26.63 oz)
Dimensions	139 x 104 x 79 mm (5.47 x 4.11 x 3.09")

Other features

Orientation sensor	Yes
Timelapse recording	Yes (by USB cable and PC)
GPS	Optional



6. Point and Shoot Camera

Technical Specifications

Basic

Type of Camera	Compact
Effective Resolution	20.1MP
Sensor Type	CCD
Digital Zoom	4x

Lens

Optical Zoom	5x
Focal length	4.6-23.0mm

Screen

LCD Size(Inches)	3
Resolution(dots)	230k

Shooting Specs

ISO Sensitivity Range	ISO 80-1600
Scene Modes	<div> Portrait - Landscape - Sports - Night Portrait - Party/Indoor - Beach - Snow - Sunset - Dusk/Dawn </div> <div> - Night Landscape - Close-up - Food - Museum - Fireworks Show - Black and white copy - Backlighting - Panorama Assist - Pet Portrait </div>

Video

Maximum Resolution	1280 x 720
Maximum Frame rate	30fps

Media

Storage	SD, SDHC, SDXC
File formats supported	JPEG

Connectivity

USB Cable	Yes
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Dimensions

Dimensions (W x D x H)	95.4 x 29 x 59.8 mm
Weight	164 grams