

University Institute of Engineering & Technology
Panjab University, Chandigarh
(Phone No 0172-2532995)

No.03/DMMHEDS/UIET

Dated: 22.02.2023

Notice for Inviting Quotations

Kindly send your quotation in sealed cover with respect to the following items and the date duly subscribed on the cover for the purchase of following item subject to the Terms and Conditions given on the backside.

LAST DATE OF SUBMISSION OF QUOTATION IS 07.03.2024

Item No.	Item	Specifications		Quantity
1	Digital camera with lens for real time capturing	Sensor	Sensor type 1/2.5 type (7.20 mm) back-illuminated Exmor R® CMOS Sensor Effective Pixels (Video) approx. 8.29 Megapixels (16:9) Effective Pixels (Still Image) approx. 8.29 Megapixels (16:9) / approx. 6.22 Megapixels (4:3)	1
		Processor	Image processor BIONZ X™ image processor	
		Lens	Lens type ZEISS Vario-Sonnar® T* Filter diameter 55 mm Lens Cover Auto Aperture F 2.0 - 3.8 Focal Distance f = 4.4 to 88 mm Focal Length (35 mm equivalent) (Video) f = 1-1/16 to 21-1/8 , f = 26.8 - 536.0 mm (16:9) Focal Length (35mm equivalent) (Still Image) f = 1-1/16 to 21-1/8 (16:9), f = 1-5/16 to 25-7/8 (4:3), f = 26.8 to 536.0 mm (16:9), f = 32.8 to 656.0 mm (4:3)	



	<p>Minimum focus distance approx. 1 cm (Wide), approx. 80 cm (Tele), (approx. 13/32 (Wide), approx. 31-1/2 (Tele))</p> <p>Iris Diaphragm 6 blades</p> <p>ND Filter</p>
Zoom	<p>Optical zoom 20x</p> <p>Clear Image Zoom 4K: 30x, HD: 40x</p> <p>Digital zoom 250x</p>
LCD	<p>Screen type 7.5 cm (3.0 type) Xtra Fine LCD™ display (921 600 dots) Wide (16:9)</p> <p>Touch Panel Yes</p> <p>Brightness Control Yes (Menu)</p> <p>Marker/Grid Display Grid Line</p> <p>Angle Adjustment Opening Angle: max. 90°, Turning Angle: max. 270°</p>
Image Stabilization	<p>Image Stabilization Type Balanced Optical SteadyShot w/ Intelligent Active mode (5-axis)</p>
Focus	<p>Focus Type Contrast AF</p> <p>Focus Mode Auto / Manual (Touch Panel)</p> <p>Focus Area Full Range Focus / Spot Focus</p> <p>Fast Intelligent AF Yes</p> <p>Lock-On AF Lock-on AF</p> <p>Manual Focus Assist Peaking Display</p>
Exposure	<p>Mode Auto, Flexible Spot (Touch Panel), Manual (Menu)</p> <p>Metering Modes</p>

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		<p>Multi-segment / Spot</p> <p>Exposure Compensation AE Shift (Touch Panel)</p> <p>LOW LUX Mode Yes</p> <p>Auto Iris Control F2.0-F11</p> <p>Manual Iris Control F2.0-F11</p> <p>Manual Exposure Assist Zebra Pattern Display</p> <p>Backlight Compensation Yes (Auto)</p> <p>Gain Control Auto</p> <p>AGC Limit Yes</p> <p>Minimum Illumination 4K: Standard: 9 lux (1/50 shutter speed), HD: Standard: 6 lux (1/50 shutter speed), 4K: Low Lux 1.8 lux (1/25 shutter speed), HD: Low Lux 1.2 lux (1/25 shutter speed)</p>	
	Shutter Speed	<p>Auto Control Range 1/6–1/10000</p> <p>Standard 1/50–1/10000</p> <p>Manual Iris Control (photo mode) 1/25–1/10000</p> <p>Manual Shutter 1/6–1/10000</p> <p>Smooth Slow 1/215–1/10000</p>	
	White balance	<p>White Balance Modes Auto / Onepush / Outdoor / Indoor</p> <p>White Balance Shift Yes</p>	
	Flash	<p>Flash Metering System Pre-flash TTL</p> <p>Flash Compensation Yes (3 steps)</p> <p>Flash Mode Auto / On / OFF</p>	

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		Storage Media	Media Type XAVC S 4K (100 Mbps): SDHC Memory Card (4 GB or over, UHS-I U3 or Higher) / SDXC Memory Card (UHS-I U3 or higher), XAVC S 4K (60 Mbps): SDHC Memory Card (4 GB or over, Class 10 or higher) / SDXC Memory Card (Class 10 or higher), XAVC S HD: SDHC Memory Card (4 GB or over, Class 10 or higher) / SDXC Memory Card (Class 10 or higher), AVCHD, Still: Memory Stick PRO Duo (Mark 2), Memory Stick PRO-HG Duo, Memory Stick XC-HG Duo, SD / SDHC / SDXC Memory Card (Class 4 or higher)	
		Recording	Recording Format (Video) XAVC S format: MPEG4-AVC / H.264, AVCHD format ver. 2.0 compatible: MPEG4-AVC / H.264, MP4: MPEG-4 AVC / H.264 Video Resolution XAVC S 4K: 3840 x 2160 / 25p, 24p, XAVC S HD: 1920 x 1080 / 50p, 25p, 24p, AVCHD: 1920 x 1080 / 50p (PS), 25p (FX, FH), 24p (FX, FH), 50i (FX, FH), 1440 x 1080 / 50i (HQ, LP), MP4: 1280 x 720 / 25p Video Recording Rate (ABR / VBR) XAVC S 4K: approx. 100 Mbps, XAVC S 4K: approx. 60 Mbps, XAVC S HD: approx. 50 Mbps, AVCHD PS: approx. 28 Mbps / FX: approx. 24 Mbps / FH: approx. 17 Mbps / HQ: approx. 9 Mbps / LP: approx. 5 Mbps, MP4: approx. 3 Mbps Recording Format (Still Image) JPEG (DCF Ver. 2.0 compatible, Exif Ver. 2.3 compatible, MPF Baseline compatible) Still Image Size (Photo Mode) L: 16.6 Megapixels 16:9 (5440 x 3056), 12.5 Megapixels 4:3 (4080 x 3056), M: 8.3 Megapixels 16:9, (3840 x 2160), 6.2 Megapixels 4:3 (2880 x 2160), S: 2.1 Megapixels 16:9 (1920 x 1080), 0.3 Megapixels 4:3 (640 x 480) Still Image Size (Movie Mode) M: 8.3 MP 16:9 (3840 x 2160), S: 2.1 MP 16:9 (1920 x 1080) Still Image Size (Photo Capture)	

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		<p>XAVC S 4K: 8.3 MP 16:9 (3840 x 2160), XAVC S HD: 2.1 MP 16:9 (1920 x 1080), AVCHD: 2.1 MP 16:9 (1920 x 1080)</p> <p>Still Image Size (Time-Lapse Capture) 4K: L (8.3 M: 3840 x 2160) / HD: S (2.1 M: 1920 x 1080)</p> <p>Still Image Size (Dual Record) M: 8.3 Megapixels 16:9 (3840 x 2160), S: 2.1 Megapixels 16:9 (1920 x 1080)</p>
	Audio	<p>Microphone Built-in Zoom Microphone</p> <p>Audio Recording Format LPCM 2ch (48 kHz / 16 bit) , Dolby Digital 5.1ch, Dolby Digital 5.1 Creator, Dolby Digital 2ch Stereo, Dolby Digital Stereo Creator, MPEG-4 AAC-LC 2ch</p> <p>Mic Level Control Yes (31 steps)</p> <p>Auto Wind Noise Reduction Yes (On/Off)</p> <p>My Voice Cancelling Yes</p> <p>Speaker Built-in Zoom Microphone, Monaural Speaker</p>
	Advanced Feature	<p>High Speed Rec Yes (100p / 1920 x 1080, 100 / 60 Mbps)</p> <p>Time-lapse Capture Time-Lapse Capture, Shooting Interval (1/2/5/10/30/60 sec), Shot Number (1- 999), Capture Image Size (4K: L (8.3 M, 3840 x 2160) / HD: S (2.1 M, 1920 x 1080)), AE Mode (AE Lock / AE Tracking)</p> <p>Scene Selection Auto / Night Scene / Sunrise & Sunset / Fireworks / Landscape / Portrait / Spotlight / Beach / Snow</p> <p>NightShot Infrared System -</p> <p>Time Code/User Bit Yes</p> <p>Other Features Face Detection , Cinematone, Golf Shot (Yes), Smooth Slow Rec (Yes), Fader Effect(s) (White / Black), Intelligent Auto (Portrait / Baby / Walk / Tripod / Backlight /</p>

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		Landscape / Spotlight / Twilight / Macro / Low-light / Auto wind noise reduction), Smile Shutter (Off / Dual Capture / Always On), Red-Eye Reduction , Direct Copy	
	Playback	Fast Playback About 5 times / 10 times / 30 times / 60 times Slow Playback Forward: 1/5 speed, Reverse: 1/2 speed Trimming Playback Yes Highlight Movie Maker Highlight Movie Maker, highlight background music (6 preinstalled music files, music transfer compatible) Motion Shot Video Yes Slide Show (Still Image) Slide Show	
	Wireless Function	Wi-Fi® Yes (Wi-Fi Compatible, IEEE 802.11 b/g/n (2.4 GHz band)) NFC™ Yes (NFC forum Type 3 Tag compatible) Multi Camera Control Yes	
	Terminal / Shoe	Accessory Shoe Yes (Multi Interface Shoe) HDMI Terminal Yes (HDMI micro) Projector Input - Multi/Micro USB Terminal Yes Remote Terminal Integrated into Multi/Micro USB Terminal STD Output Composite Video Out (AV CABLE (sold separately)) Microphone Input Stereo Minijack Headphone Jack Stereo Minijack Memory Card Slot	

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			<p>Memory Stick PRO Duo and SD / SDHC / SDXC compatible</p> <p>DC IN Yes</p> <p>Power: Battery type InfoLITHIUM with AccuPower™ Metre System (V Series)</p> <p>Power Consumption (LCD) 4K: 5.1 W</p> <p>Power Consumption (Viewfinder) -</p> <p>Power Requirements 6.8 V/7.3 V (battery pack), 8.4 V (AC Adaptor)</p> <p>Charge on Camcorder (charging time with supplied battery) Yes (approx. 3h 25min)</p> <p>USB Charging DC 5 V 1,500 mA</p> <p>USB Power Supply</p> <p>Accessories: Tripod must be supplied by vendor Warranty: 1 year Onsite</p>	
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Note: 1. Kindly send the bid into two parts indicating Technical and Financial Bid. The **Technical bid** and the **Financial Bid** should be sealed by the bidder in **separate covers** duly super scribed and both these sealed covers are to be put in bigger cover which should also be sealed and duly super scribed.

2. The Quotation should be submitted along with Earnest Money @ 2% of the estimated quoted price in the shape of Draft/Term Deposit/ Call Deposit Receipt valid for a minimum period of 3 months in favour of the Director, UIET, PU, Chandigarh.

Note: a) Kindly put **Earnest Money** in **separate envelope (cover)** other than Technical and Financial Bid covers.

b) NIQ with detailed specifications is also uploaded on website at www.uiet.puchd.ac.in


 (Dr. Nirmal Kaur)
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 (Principal Investigator)
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