



ASTI-FM 03-10  
REV 3/13 January 2020

**DOST-ASTI Bids and Awards Committee  
REQUEST FOR QUOTATION**

<b>Kind of Procurement Activity:</b>	Negotiated Procurement: Small-value Procurement		
<b>Deadline of Submission of Bids:</b>	Nov-16-2021, 2:00 PM		
<b>RFQ No.:</b>	21-10-3578	<b>Date:</b>	November-10-2021
<b>PR No.:</b>	GAA-21-09-12153	<b>Date:</b>	September-21-2021

The Department of Science and Technology (DOST) - Advanced Science and Technology Institute (ASTI), through its Bids and Awards Committee (BAC), intends to procure the item/s listed below. As such, suppliers, contractors, or distributors are invited to submit their quotation/s duly signed by authorized representative. Prospective bidder/s who will submit a proposal with the single/lowest calculated and responsive quotation shall be selected. Guidelines on the format and eligibility documents are listed at the box below the item/s to be procured.

Quotations may be sent via **a)** electronic mail at bac-sec@asti.dost.gov.ph, **b)** fax message, or **c)** delivering documents to the BAC Secretariat. For further inquiries, you may contact +63 2 249-8500 local 1206/1212 or +63 2 426-7423.

Thank you.

Respectfully,

**GERWIN P. GUBA**  
BAC Chairman

NO.	TECHNICAL SPECIFICATIONS	QTY	UNIT	UNIT PRICE(Php)	TOTAL PRICE(Php)
1	<p><b>Audio Field Recorder - 6 Input</b></p> <p>1. 6-channel/14-track field audio recorder/mixer.</p> <p>2. Recording Media: SD CARDS, SDHC CARDS, SDXC CARDS.</p> <p>3. Inputs.</p> <p>3.1. XLR: 6.</p> <p>3.2. Mic.</p> <p>3.2.1. Input gain: +12 dB - +75 dB.</p> <p>3.2.2. Input impedance: 3 k-ohm or more.</p> <p>3.2.3. Maximum input level: +4 dBu.</p> <p>3.3. Line.</p> <p>3.3.1. Input gain: -8 dB - +55 dB.</p> <p>3.3.2. Input impedance: 5 k-ohm or more.</p> <p>3.3.3. Maximum input level: +24 dBu.</p> <p>3.4. Phantom Power: +24/+48V 10mA maximum for each channel.</p> <p>3.5. Equivalent Input Noise: -127 dBu or less (A-weighted, +75 dB input gain, 150 ohm input).</p> <p>4. Outputs.</p> <p>4.1. Line Output.</p> <p>4.1.1. Connectors: 3.5 mm stereo mini unbalanced output.</p> <p>4.1.2. Output impedance: 100 ohm or less.</p>	1	unit	59000.00	59,000.00

4.1.3. Reference output level: -10 dBV, 1 kHz, 10 k-ohm load.

4.1.4. Maximum output level: +10 dBV, 1 kHz, 10 k-ohm load.

4.1.5. D/A dynamic range: 95 dB typical (-60dBFS input, A-weighted).

#### 4.2. Headphone Output.

4.2.1. Connector: 3.5 mm stereo mini unbalanced output.

4.2.2. Impedance: 15 ohm or less.

4.2.3. Maximum output level: 100 mW + 100 mW (32 ohm load).

4.2.4. D/A dynamic range: 108 dB typical (-60dBFS input, A-weighted).

### 5. Recording Formats.

#### 5.1. WAV.

5.1.1. Supported Formats:  
44.1/47.952/48/48.048/88.2/96/192 kHz,  
16/24-bit/32-bit float, mono/stereo/2-8ch poly,  
BWF/iXML.

5.1.2. Maximum Simultaneous Recording Tracks: 14 (6 inputs x 2 (Linear and Floating) + LR mix).

5.1.3. 6 (6 inputs (Linear or Floating) at Float(32bit) Mode, 192 kHz).

#### 5.2. MP3.

5.2.1. Supported Formats: 128/192/320 kbps, 44.1/48 kHz, ID3v1 tags.

5.2.2. Maximum Simultaneous Recording Tracks: 2.

### 6. Recording Time.

#### 6.1. Using a 32 GB Card.

6.1.1. 30:46:00 (48 kHz/24-bit stereo WAV).

6.1.2. 7:41:00 (192 kHz/24-bit stereo WAV).

### 7. Timecode

7.1. Connectors: 3.5 mm stereo mini (Tip: In, Ring: Out).

7.2. MODES: Off, Int Free Run, Int Record Run, Int RTC Run, Ext, Ext Auto Rec (audio clock can be synchronized to timecode).

7.3. Frame Rates: 23.976 ND, 24 ND, 25 ND, 29.97 ND, 29.97 D, 30 ND, 30 D.

7.4. Precision: +/-0.2 ppm.

7.5. Allowed Input Level: 0.2 - 5.0 Vpp.

7.6. Allowed Input Impedance: 4.6 k-ohm.

7.7. Output Level: 3.3 Vpp.

7.8. Output Impedance: 50 ohm or less.

### 8. Power.

#### 8.1. Options.

8.1.1. AC adapter: DC 5V (supports USB bus power).

8.1.2. Sony L-Series battery or similar.

8.1.3. 4 AA batteries (alkaline, lithium or rechargeable NiMH batteries).

#### 8.2. Continuous Recording Time.

8.2.1. 48 Khz/16-Bit 2Ch Recording to SD Card (Line Out Off, Timecode Off, LED/LCD Brightness 5, Headphones Into 32 ohm Load, Phantom Off).

8.2.1.1. Alkaline batteries: 7.5 hours or more.

	<p>8.2.1.2. NiMH batteries (2450 mAh): 10.5 hours or more.</p> <p>8.2.1.3. Lithium batteries: 16.5 hours or more.</p> <p>8.2.2. 48 Khz/24-Bit 6Ch Recording to SD Card (Line Out Off, Timecode Off, LED/LCD Brightness 5, Headphones Into 32 ohm Load, Phantom Off).</p> <p>8.2.2.1. Alkaline batteries: 5.0 hours or more.</p> <p>8.2.2.2. NiMH batteries (2450 mAh): 7.0 hours or more.</p> <p>8.2.2.3. Lithium batteries: 10.5 hours or more.</p> <p>8.2.3. 192 Khz/24-Bit 6Ch Recording to SD Card (Line Out On, Time Code Set To Int Free Run, LED/LCD Brightness 60, Headphones Into 32 ohm Load, Phantom at 48 V).</p> <p>8.2.3.1. Alkaline batteries: 0.5 hours or more.</p> <p>8.2.3.2. NiMH batteries (2450 mAh): 1.5 hours or more.</p> <p>8.2.3.3. Lithium batteries: 3.5 hours or more.</p> <p>9. Display: 1.54-inch full-color LCD (240 × 240).</p> <p>10. USB.</p> <p>10.1. Mass Storage Operation: Class USB 2.0 High Speed.</p> <p>10.2. Multitrack Audio Interface Operation: Class USB 2.0 High Speed.</p> <p>10.2.1. Specifications Sampling Rate: 44.1/48/88.2/96 Khz.</p> <p>10.2.2. Bit Rate: 16/24-Bit.</p> <p>10.2.3. Channels: 6 In/4 Out.</p> <p>10.3. Stereo Mix Audio Interface: Class USB 2.0 Full Speed.</p> <p>10.3.1. Specifications Sampling Rate: 44.1/48 Khz.</p> <p>10.3.2. Bit Rate: 16-Bit.</p> <p>10.3.3. Channels: 2 In/2 Out.</p> <p>10.4. AIF With Record Operation: Class USB 2.0 High Speed.</p> <p>10.4.1. Specifications Sampling Rate: 44.1/48 Khz.</p> <p>10.4.2. Bit Rate: 16/24-Bit.</p> <p>10.4.3. Channels: 8 In/4 Out.</p> <p>11. Power Consumption: 10 W.</p> <p>12. Warranty: 12 months.</p> <p>13. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>14. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
2	<p><b>Microphone – Shotgun</b></p> <p>1. Form Factor: Stand / Boom mount.</p> <p>2. Acoustic Principle: Line Gradient.</p> <p>3. Capsule: Condenser.</p> <p>4. Diaphragm: 0.50 inch.</p> <p>5. Polar Pattern: Supercardioid.</p> <p>6. Address Type: End.</p> <p>7. Pad: -10 dB.</p> <p>8. Frequency Range: 20Hz - 20kHz (selected HPF</p>	1	unit	30100.00	30,100.00

	<p>@75Hz).</p> <p>9. Output Impedance: 200 ohm.</p> <p>10. Maximum SPL: 135 dBSPL.</p> <p>11. Off-Axis Rejection.</p> <p>11.1. 5 dB at 60 degrees.</p> <p>11.2. 24 dB at 120 degrees.</p> <p>11.3. 18 dB at 180 degrees.</p> <p>12. Sensitivity: -32.0dB re 1 Volt/Pascal (25.00mV @ 94 dB SPL) +/- 2 dB @ 1kHz.</p> <p>13. Equivalent Noise Level (A-weighted): 16 dBA.</p> <p>14. On-Board Controls.</p> <p>14.1. High-Pass Filter.</p> <p>14.2. HF.</p> <p>14.3. Pad.</p> <p>14.4. On/Off.</p> <p>15. Windscreen: Foam.</p> <p>16. Power.</p> <p>16.1. +48V phantom power.</p> <p>16.2. Built in internal battery.</p> <p>17. Output: XLR.</p> <p>18. Warranty: 12 months.</p> <p>19. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>20. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
3	<p><b>Microphone Boom</b></p> <p>1. Length.</p> <p>1.1. Minimum: 810 mm.</p> <p>1.2. Maximum: 3000 mm.</p> <p>2. Material: Carbon Fiber.</p> <p>3. Top: Fixed.</p> <p>4. Number of Sections: 5.</p> <p>5. Adjustment Lock: Twist lock.</p> <p>6. Warranty: 12 months.</p> <p>7. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>8. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>	1	unit	22500.00	22,500.00
4	<p><b>Battery Charger 2 Bay Kit – Lithium-Ion, V-Mount, with Two (2) 98Wh Batteries</b></p> <p>1. Battery Charger.</p> <p>1.1. Dual battery charger.</p> <p>1.2. Mount / Series Type: V-Mount.</p> <p>1.3. XLR DC output.</p> <p>1.3.1. Maximum: 60 W (15 V, 4.0 A).</p> <p>1.4. AC Input Power: 90 to 242 VAC, 50 / 60 Hz.</p> <p>1.5. Output Voltage: 16.8 VDC at 3 A.</p> <p>1.6. Chemistry: Lithium-Ion.</p> <p>1.7. Maximum Wattage: 60 W.</p> <p>1.8. 4-LED power gauge.</p>	1	unit	45000.00	45,000.00

	<p>2. Battery.</p> <p>2.1. Quantity: 2 units.</p> <p>2.2. Mount / Series Type: V-Mount.</p> <p>2.3. Chemistry: Lithium-Ion.</p> <p>2.4. Capacity: 98 Wh.</p> <p>2.5. Amp-Hours: 6.8 Ah.</p> <p>2.6. Output Voltage: 14.8 VDC</p> <p>2.7. Maximum Load: 12 A.</p> <p>2.8. Accessory Port: 1 x D-Tap Input/Output.</p> <p>2.9. 1 x USB Type-A Output.</p> <p>3. Warranty: 12 months.</p> <p>4. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>5. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
5	<p><b>Battery Mount Plate – V-Mount with 15mm Rod Mount</b></p> <p>1. 15mm LWS (Lightweight Support) Rod Mount.</p> <p>2. Plate Front / Battery Mount: V-Mount.</p> <p>3. Plate Rear Mount: 15 mm Rod Clamp.</p> <p>4. Material: Aluminum, PVC.</p> <p>5. Simultaneous Outputs.</p> <p>5.1. 14.8 VDC P-Tap.</p> <p>5.2. 5 VDC USB.</p> <p>5.3. 7.2 VDC barrel.</p> <p>5.4. 12 VDC barrel.</p> <p>6. Included Cables.</p> <p>6.1. P-Tap to 2.5mm cable.</p> <p>6.2. LP-E6 dummy battery cable.</p> <p>6.3. USB cable.</p> <p>6.4. 2.1mm to 2.5mm cable.</p> <p>7. Connectors.</p> <p>7.1. 1 x D-Tap</p> <p>7.2. 1 x USB Type-A</p> <p>7.3. 2 x DC Jack</p> <p>8. Warranty: 12 months.</p> <p>9. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>10. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>	1	unit	17000.00	17,000.00
6	<p><b>Digital Film Video Camera – 6K, Super35 sensor, EF Mount, HDMI (Body)</b></p> <p>1. Camera Features.</p> <p>1.1. Effective Sensor Size: 23.10mm x 12.99mm (Super 35).</p> <p>1.2. Lens Mount: Active EF mount.</p> <p>1.3. Lens Control: Iris, focus and zoom on supported lenses.</p> <p>1.4. Dynamic Range: 13 Stops.</p> <p>1.5. Dual Native ISO: 400 and 3200.</p> <p>1.6. Shooting Resolutions.</p>	1	unit	155590.00	155,590.00

- 1.6.1. 6144 x 3456 (6K) up to 50 fps.
- 1.6.2. 6144 x 2560 (6K 2.4:1) up to 60 fps.
- 1.6.3. 5744 x 3024 (5.7K 17:9) up to 60 fps.
- 1.6.4. 4096 x 2160 (4K DCI) up to 60 fps.
- 1.6.5. 3840 x 2160 (Ultra HD) up to 60 fps.
- 1.6.6. 3728 x 3104 (3.7K 6:5 anamorphic) up to 60 fps.
- 1.6.7. 2868 x 1512 (2.8K 17:9) up to 120 fps.
- 1.6.8. 1920 x 1080 (HD) up to 120 fps.
- 1.7. Frame Rates.
  - 1.7.1. Maximum sensor frame rate dependent on resolution and codec selected.
  - 1.7.2. Project frame rates of 23.98, 24, 25, 29.97, 30, 50, 59.94 and 60 fps supported.
  - 1.7.3. Off-speed frame rates up to 60 fps in 6K 2.4:1, 120 fps in 2.8K 17:9 and 1080HD.
- 1.8. Built in ND Filters.
  - 1.8.1. Four position ND filter with clear, 2 stop, 4 stop and 6 stop IR ND filters.
- 1.9. Focus: Auto focus available using compatible lenses.
- 1.10. Iris Control.
  - 1.10.1. Iris wheel and touchscreen slider for manual iris adjustment on electronically controllable lenses.
  - 1.10.2. Iris button for instant auto iris settings on compatible lenses.
- 1.11. Screen Dimensions: 5-inch, 1920 x 1080.
- 1.12. Screen Brightness: 1500 nits
- 1.13. Screen Type: LCD capacitive touchscreen.
- 1.14. Metadata Support.
  - 1.14.1. Automatically populated lens data from electronic EF lenses.
  - 1.14.2. Automatic recording of camera settings and slate data such as project, scene number, take and special notes.
  - 1.14.3. A 3D LUT can also be embedded in metadata of RAW files.
- 1.15. Controls.
  - 1.15.1. Touchscreen menus on 5-inch screen.
  - 1.15.2. 1 x Power Switch.
  - 1.15.3. 1 x Record Button.
  - 1.15.4. 1 x Stills Button.
  - 1.15.5. 1 x Scroll Wheel with push integrated into handgrip.
  - 1.15.6. 1 x ISO Button.
  - 1.15.7. 1 x White Balance.
  - 1.15.8. 1 x Shutter Button.
  - 1.15.9. 3 x software configurable Fn buttons.
  - 1.15.10. 2 x ND filter button.
  - 1.15.11. 1 x Focus Button.
  - 1.15.12. 1 x IRIS Button.
  - 1.15.13. 1 x High Frame Rate (HFR) Button.
  - 1.15.14. 1 x Zoom Button.
  - 1.15.15. 1 x Menu Button.
  - 1.15.16. 1 x Playback Button.
- 1.16. Timecode Clock: Less than 1 frame drift every 8 hours.
- 2. Connections.
  - 2.1. Total Video Inputs: None.
  - 2.2. Total Video Outputs: 1 x HDMI up to 1080p60.

### 2.3. Analog Audio Inputs.

2.3.1. 2 x mini XLR analog switchable between mic with phantom power support and line level (up to +14dBu).

2.3.2. 1 x 3.5mm Stereo Input. Can also be used for Timecode input.

2.4. Analog Audio Outputs: 1 x 3.5mm headphone jack.

2.5. Computer Interface: USB Type-C for external drive recording, PTP camera control and software updates.

### 3. Audio.

3.1. Microphone: Integrated stereo microphone.

3.2. Built in Speaker: 1 x mono speaker.

### 4. Standards.

4.1. SD Video Standards

4.1.1. None

4.2. HD Video Standards.

4.2.1. 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 .

4.3. Ultra HD Video Standards.

4.3.1. 2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 2160p50, 2160p59.94, 2160p60.

4.4. 4K DCI Standards.

4.4.1. 4KDCIp23.98, 4KDCIp24, 4KDCIp25, 4KDCIp29.97, 4KDCIp30, 4KDCIp50, 4KDCIp59.94, 4KDCIp60.

### 5. Media.

5.1. Media.

5.1.1. 1 x CFast card slot.

5.1.2. 1 x SD UHS-II card slot.

5.1.3. 1 x USB-C 3.1 Gen 1 expansion port for external media for RAW and ProRes Recording.

5.2. Media Format.

5.2.1. Can format media to ExFAT (Windows/Mac) or HFS+ (Mac) file systems.

### 6. Supported Codecs.

6.1. RAW Constant Bitrate 3:1,

6.2. RAW Constant Bitrate 5:1,

6.3. RAW Constant Bitrate 8:1,

6.4. RAW Constant Bitrate 12:1,

6.5. RAW Constant Quality Q0,

6.6. RAW Constant Quality Q1,

6.7. RAW Constant Quality Q3,

6.8. RAW Constant Quality Q5,

6.9. ProRes 422 HQ QuickTime,

6.10. ProRes 422 QuickTime,

6.11. ProRes 422 LT QuickTime,

6.12. ProRes 422 Proxy QuickTime.

### 7. Control.

7.1. External Control.

7.1.1. iPad control, Bluetooth control, USB PTP camera control. External control of some camera settings, focus, iris and zoom with compatible lenses, color corrector, tally and internal record start and stop when used with a compatible ATEM and ATEM

Software Control.

## 8. Color Corrector.

8.1. Color Corrector: DaVinci YRGB.

## 9. Storage Features.

### 9.1. Storage Type.

9.1.1. 1 x CFast 2.0.

9.1.2. 1 x SD UHS-II card.

9.1.3. 1 x high speed USB-C expansion port for external media.

## 10. Recording Formats.

10.1. RAW 3:1, 5:1, 8:1, 12:1, Q0, Q1, Q3 and Q5 at 6144 x 3456, 6144 x 2560, 5744 x 3024, 4096 x 2160, 3728 x 3104 and 2868 x 1512 with film, extended video, video dynamic range or custom 3D LUT embedded in metadata.

10.2. ProRes at 4096 x 2160, 3840 x 2160 and 1920 x 1080 with film, extended video or video dynamic range or custom 3D LUT.

## 11. Storage Rates.

Storage rates based on 30 frames per second.

### 11.1. 6144 x 3456 (6K)

11.1.1.1. RAW 3:1 - 323 MB/s

11.1.1.2. RAW 5:1 - 194 MB/s

11.1.1.3. RAW 8:1 - 121 MB/s

11.1.1.4. RAW 12:1 - 81 MB/s

11.1.1.5. RAW Q0 - 242 to 483 MB/s

11.1.1.6. RAW Q1 - 162 to 387 MB/s

11.1.1.7. RAW Q3 - 108 to 277 MB/s

11.1.1.8. RAW Q5 - 65 to 162 MB/s

### 11.2. 6144 x 2560 (6K 2.4:1)

11.2.1. RAW 3:1 - 240 MB/s

11.2.2. RAW 5:1 - 144 MB/s

11.2.3. RAW 8:1 - 90 MB/s

11.2.4. RAW 12:1 - 60 MB/s

11.2.5. RAW Q0 - 180 to 359 MB/s

11.2.6. RAW Q1 - 120 to 287 MB/s

11.2.7. RAW Q3 - 80 to 205 MB/s

11.2.8. RAW Q5 - 49 to 120 MB/s

### 11.3. 5744 x 3024 (5.7K 17:9)

11.3.1. RAW 3:1 - 264 MB/s

11.3.2. RAW 5:1 - 159 MB/s

11.3.3. RAW 8:1 - 100 MB/s

11.3.4. RAW 12:1 - 67 MB/s

11.3.5. RAW Q0 - 198 to 396 MB/s

11.3.6. RAW Q1 - 133 to 317 MB/s

11.3.7. RAW Q3 - 89 to 227 MB/s

11.3.8. RAW Q5 - 54 to 133 MB/s

### 11.4. 4096 x 2160 (4K DCI)

11.4.1. RAW 3:1 - 136 MB/s

11.4.2. RAW 5:1 - 82 MB/s

11.4.3. RAW 8:1 - 51 MB/s

11.4.4. RAW 12:1 - 35 MB/s

11.4.5. RAW Q0 - 102 to 203 MB/s

11.4.6. RAW Q1 - 68 to 163 MB/s

11.4.7. RAW Q3 - 46 to 116 MB/s

11.4.8. RAW Q5 - 28 to 68 MB/s

11.4.9. Apple ProRes 422 HQ - 117.88 MB/s



- 11.4.10. Apple ProRes 422 - 78.63 MB/s
- 11.4.11. Apple ProRes 422 LT - 54.63 MB/s
- 11.4.12. Apple ProRes Proxy - 24.25 MB/s
- 11.4.13. 3840 x 2160 (Ultra HD)
- 11.4.14. Apple ProRes 422 HQ - 110 MB/s
- 11.4.15. Apple ProRes 422 - 73.6 MB/s
- 11.4.16. Apple ProRes 422 LT - 51 MB/s
- 11.4.17. Apple ProRes Proxy - 22.4 MB/s
- 11.5. 3728 x 3104 (3.7K 6:5 anamorphic)
  - 11.5.1. RAW 3:1 - 177 MB/s
  - 11.5.2. RAW 5:1 - 106 MB/s
  - 11.5.3. RAW 8:1 - 67 MB/s
  - 11.5.4. RAW 12:1 - 45 MB/s
  - 11.5.5. RAW Q0 - 133 to 265 MB/s
  - 11.5.6. RAW Q1 - 89 to 212 MB/s
  - 11.5.7. RAW Q3 - 60 to 152 MB/s
  - 11.5.8. RAW Q5 - 36 to 89 MB/s
- 11.6. 2868 x 1512 (2.8K 17:9)
  - 11.6.1. RAW 3:1 - 67 MB/s
  - 11.6.2. RAW 5:1 - 41 MB/s
  - 11.6.3. RAW 8:1 - 26 MB/s
  - 11.6.4. RAW 12:1 - 17 MB/s
  - 11.6.5. RAW Q0 - 51 to 101 MB/s
  - 11.6.6. RAW Q1 - 34 to 81 MB/s
  - 11.6.7. RAW Q3 - 23 to 58 MB/s
  - 11.6.8. RAW Q5 - 14 to 34 MB/s
- 11.7. 1920 x 1080
  - 11.7.1. Apple ProRes 422 HQ - 27.5 MB/s
  - 11.7.2. Apple ProRes 422 - 18.4 MB/s
  - 11.7.3. Apple ProRes 422 LT - 12.75 MB/s
  - 11.7.4. Apple ProRes Proxy - 5.6 MB/s

## 12. Software.

### 12.1. Software Included

- 12.1.1. OS.
- 12.1.2. Color correction and non-linear video editing (NLE) application for Mac and Windows including activation key.
- 12.1.3. Camera Setup.
- 12.1.4. RAW Player.
- 12.1.5. RAW QuickLook Plugin.
- 12.1.6. RAW SDK.
- 12.1.7. RAW Speed Test.

## 13. Operating Systems.

- 13.1. Mac 11.1 Big Sur or later.
- 13.2. Windows 10.

## 14. Power Requirements.

- 14.1. Power Supply: 1 x External 12V power supply.
- 14.2. External Power Input: 1 x 2 pin locking connector.
- 14.3. Battery Type: NP-F570.
- 14.4. Battery Life: Approximately 60 minutes (recording 6K RAW at 24 fps to CFast 2.0 with screen brightness at 50%).
- 14.5. Power: 12V-20V.

## 15. Accessories and Other Inclusions.

- 15.1. Lens turret dust cap.
- 15.2. Camera strap.

	<p>15.3. 30W power supply with locking connector and international adapters.</p> <p>15.4. NP-F570 battery or similar.</p> <p>15.5. Color correction and non-linear video editing (NLE) application software activation key.</p> <p>16. Warranty: 12 Month Limited Manufacturer's Warranty.</p> <p>17. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>18. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
7	<p><b>Camera Cage Rig Kit – For Digital Film Video Camera – For 6K, Super35 sensor, EF Mount, HDMI (Body)</b></p> <p>1. Camera Cage.</p> <p>1.1. Modular formfitting cage that protects and enables accessory mounting on camera.</p> <p>1.2. Mounting.</p> <p>1.2.1. Accessory Mounting.</p> <p>1.2.1.1. Multiple 1/4 inch-20 thread.</p> <p>1.2.1.2. Multiple 3/8 inch-16 thread.</p> <p>1.2.2. Camera Mounting: 1/4 inch-20 screw.</p> <p>1.2.3. Tripod Mounting.</p> <p>1.2.3.1. Built-In Arca-Type Plate.</p> <p>1.2.3.2. 1/4 inch-20 Thread.</p> <p>1.2.3.3. 3/8 inch-16 Thread.</p> <p>1.2.4. Shoe Mounting: 3 x Cold Shoe.</p> <p>1.2.5. Rosettes: 2 x ARRI Rosette with M6 Thread.</p> <p>1.2.6. Rail Mounting: 1 x NATO Rail.</p> <p>1.3. General.</p> <p>1.3.1. Support Type: Cage.</p> <p>1.3.2. Camera Compatibility: Digital Film Video Camera – 6K, Super35 sensor, EF Mount, HDMI (Body).</p> <p>1.3.3. Construction: Aluminum, Steel.</p> <p>2. Quick Release Top Handle.</p> <p>2.1. Grip Type: Topside Handle.</p> <p>2.2. Mounting.</p> <p>2.2.1. Attachment Method: Attaches via Rod Ports.</p> <p>2.2.2. Rod Ports: 1 x 15 mm Rod Port.</p> <p>2.2.3. Accessory Mounting.</p> <p>2.2.3.1. 9 x 1/4 inch-20 Thread.</p> <p>2.2.3.2. 1 x Anti-Twist 1/4 inch-20 Thread.</p> <p>2.2.3.3. 9 x 3/8 inch-16 Thread.</p> <p>2.2.3.4. 2 x Anti-Twist 3/8 inch-16 Thread.</p> <p>2.2.4. Shoe Mounting: 2 x Built-In Cold Shoe Slot.</p> <p>2.3. General.</p> <p>2.3.1. Construction: Aluminum, Steel.</p> <p>3. SSD Drive Holder.</p> <p>3.1. Material of Construction: Aluminum Alloy, Stainless Steel.</p> <p>4. Left-Side Advanced Power Handle with Run/Stop.</p> <p>4.1. Mounting.</p> <p>4.1.1. Attachment Method: Attaches via Screw.</p> <p>4.2. General.</p>	1	unit	39525.00	39,525.00

	<p>4.2.1. Grip Type: Left-Side Handgrip.</p> <p>4.2.2. Built-In Controls: Remote Trigger.</p> <p>4.2.3. Ports.</p> <p>4.2.3.1. 1 x USB Type-C (8 VDC).</p> <p>4.2.3.2. 1 x DC Barrel (12 VDC).</p> <p>4.3. Construction: Aluminum.</p> <p>5. Left-Side Handle Adapter.</p> <p>5.1. General.</p> <p>5.1.1. Material of Construction: Aluminum Alloy, Stainless Steel.</p> <p>5.1.2. Mount: Rail.</p> <p>6. 15mm LWS Baseplate.</p> <p>6.1. Mounting.</p> <p>6.1.1. Rod Standard: 15 mm LWS / 60 mm Spacing.</p> <p>6.1.2. Battery Plate Type: None.</p> <p>6.1.3. Accessory Mounting.</p> <p>6.1.3.1. Base: 4 x 1/4 inch-20 Thread.</p> <p>6.1.4. Tripod Mounting.</p> <p>6.1.4.1. 1/4 inch-20 Thread.</p> <p>6.1.4.2. 3/8 inch-16 Thread.</p> <p>6.1.5. Rod Ports: 2 x 15 mm Rod Port.</p> <p>6.1.6. Rosettes: 2 x ARRI Rosette with M6 Thread.</p> <p>6.2. General.</p> <p>6.2.1. Support Type: Baseplate.</p> <p>6.2.2. Grip Type: None.</p> <p>6.2.3. Camera Compatibility: Digital Film Video Camera - 6K, Super35 sensor, EF Mount, HDMI (Body).</p> <p>6.2.4. Construction: Aluminum, Steel.</p> <p>7. HDMI Right-Angle Adapter for Camera Cage.</p> <p>7.1. Material of Construction: Aluminum, Stainless Steel.</p> <p>7.2. Connector 1: 1 x Male HDMI Type A.</p> <p>7.3. Connector 2: 1 x Female HDMI Type A.</p> <p>8. 90-degree USB Type-C Cable for Camera Cage.</p> <p>8.1. Connectors: 2 x USB Type-C (Right-Angle).</p> <p>8.2. Materials: ABS Plastic, Rubber, Stainless Steel.</p> <p>8.3. Length: 12 inch / 30 cm.</p> <p>9. Threaded 15mm Rod.</p> <p>9.1. Diameter: 15 mm.</p> <p>9.2. Length: 11.81 inch / 300 mm.</p> <p>9.3. Material: Aluminum.</p> <p>9.4. Thread Type: Female / Female.</p> <p>9.5. Number of Rods: 1.</p> <p>10. Warranty: 12 Month Warranty.</p> <p>11. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>12. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
8	<p><b>Cine Lens – 24mm T1.5, EF Mount</b></p> <p>1. Focal Length: 24mm.</p> <p>2. Lens Mount: Canon EF.</p> <p>3. Format: Full Frame.</p>	1	unit	50900.00	50,900.00

	<p>4. Maximum T-Stop: T1.5.  5. Minimum T-Stop: T22.  6. Diagonal Angle of View.  6.1. Super35: 61.8 degrees.  6.2. Full Frame: 84.1 degrees.  7. Minimum Focus Distance: From 9.8-inch / 25 cm.</p> <p>8. Optical Design.  8.1. 13 Elements in 12 Groups.  8.2. Hybrid aspherical lenses/elements.</p> <p>9. Iris Blades: 8.  10. Dimensions (W x H): 3.27 x 3.27 inch / 83.1 x 83.1 mm.  11. Length: 3.84 inch / 97.5 mm.  12. Multi-layer coating.  13. Film industry standard geared focus and iris rings.  14. De-clicked aperture control ring.  15. Aperture and focus scale markings on both sides of the lens.  16. Warranty: 12 months.  17. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.  18. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
9	<p><b>Cine Lens – 50mm T1.5, EF Mount</b></p> <p>1. Focal Length: 50mm.  2. Lens Mount: Canon EF.  3. Format: Full Frame.  4. Maximum T-Stop: T1.5.  5. Minimum T-Stop: T22.  6. Diagonal Angle of View: Full Frame: 46.2 degrees.  7. Minimum Focus Distance: From 1.5 inch / 0.45 m.</p> <p>8. Optical Design.  8.1. 9 Elements in 6 Groups.  8.2. Hybrid aspherical lenses/elements.</p> <p>9. Iris Blades: 8.  10. Gear MOD and Pitch: Focus: 0.8 MOD / 32 Pitch.  11. Iris: 0.8 MOD / 32 Pitch.  12. Filter Thread: 77 mm.  13. Dimensions (W x H): 3.2 x 3.2 inch / 81.3 x 81.3 mm.  14. Length: 2.9 inch / 74.7 mm.  15. Multi-layer coating.  16. Film industry standard geared focus and iris rings.  17. De-clicked aperture control ring.  18. Aperture and distance markings printed on the lens barrel facing laterally.  19. Dimensions (W x H): 3.27 x 3.27 inch / 83.1 x 83.1 mm.  20. Length: 3.84 inch / 97.5 mm.  21. Warranty: 12 months.  22. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.  23. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>	1	unit	37100.00	37,100.00

10	<p><b>Video Light – Point Source Bi-color LED – 200W</b></p> <ol style="list-style-type: none"> <li>1. Light Fixture. <ol style="list-style-type: none"> <li>1.1. Beam Angle: 105 degrees.</li> <li>1.2. Color Temperature: 2700 to 6500K.</li> <li>1.3. Color Accuracy Standard: CRI 95.</li> <li>1.4. TLCI: 96.</li> <li>1.5. Cooling System: Fan.</li> <li>1.6. Dimming: 0 to 100%.</li> <li>1.7. Housing Material: Polycarbonate.</li> </ol> </li> <li>2. Lens. <ol style="list-style-type: none"> <li>2.1. Reflector Mount: Bowens S-Type.</li> </ol> </li> <li>3. Mounting. <ol style="list-style-type: none"> <li>3.1. Fixture Mount: 5/8 inch Receiver.</li> </ol> </li> <li>4. Remote Operation. <ol style="list-style-type: none"> <li>4.1. Remote Control Type: Bluetooth.</li> </ol> </li> <li>5. Power. <ol style="list-style-type: none"> <li>5.1. AC Input Power: 100 to 240 VAC, 50 / 60 Hz.</li> <li>5.2. DC Input Power: 48 VDC.</li> <li>5.3. Power Source: <ol style="list-style-type: none"> <li>5.3.1. AC Adapter.</li> <li>5.3.2. External Battery.</li> </ol> </li> <li>5.4. Maximum Power Consumption: 200 W.</li> </ol> </li> <li>6. Warranty: 12 months.</li> <li>7. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</li> <li>8. The aforementioned specifications are minimum requirements, unless otherwise stated.</li> </ol>	1	unit	28500.00	28,500.00
11	<p><b>Video Light – Panel Bi-color LED – 70W</b></p> <ol style="list-style-type: none"> <li>1. LED Panel type video light.</li> <li>2. With connectivity for DMX controllers.</li> <li>3. Built-in filter slot for included diffuser.</li> <li>4. Light Fixture <ol style="list-style-type: none"> <li>4.1. Color Temperature: 3300 to 5600K +/- 300K.</li> <li>4.2. Color Accuracy Standard: CRI 96.</li> <li>4.3. TLCI: 98.</li> <li>4.4. Dimming: 0 to 100%.</li> <li>4.5. Display: LCD.</li> <li>4.6. Photometrics. <ol style="list-style-type: none"> <li>4.6.1. 4200K: 445.9 fc / 4800 Lux at 3.3 ft / 1 m.</li> <li>4.6.2. 3300K: 204.4 fc / 2200 Lux at 3.28 ft / 1 m.</li> <li>4.6.3. 5600K: 241.5 fc / 2600 Lux at 3.28 ft / 1 m.</li> </ol> </li> <li>4.7. Number of LEDs. <ol style="list-style-type: none"> <li>4.7.1. Daylight: 512.</li> <li>4.7.2. Tungsten: 512.</li> </ol> </li> </ol> </li> <li>5. Connectors. <ol style="list-style-type: none"> <li>5.1. Battery Plate: 1 x V-Mount.</li> <li>5.2. Power Input Connector.</li> </ol> </li> <li>6. Mounting. <ol style="list-style-type: none"> <li>6.1. Fixture Mount: 5/8-inch Receiver.</li> </ol> </li> <li>7. Yoke.</li> </ol>	2	unit	28000.00	56,000.00

	<p>7.1. Yoke Type: Yoke/Bracket. 7.2. Locking knob.</p> <p>8. Power. 8.1. DC Input Power: 16.8 VDC. 8.2. Power Source: AC Adapter. 8.3. Max Power Consumption: 70 W.</p> <p>9. Warranty: 12 months. 10. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier. 11. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
12	<p><b>Live Production Switcher – 8 Video Inputs / 4 Video Outputs, HDMI</b></p> <p>1. Connections. 1.1. Total Video Inputs: 8. 1.2. Total Outputs: 4. 1.3. Total Aux Outputs: 2. 1.4. Total Audio Inputs: 2 x 3.5mm stereo mini jack. 1.5. Total Audio Outputs: 1 x 3.5mm stereo mini jack. 1.6. HDMI Video Inputs. 1.6.1. 8 x HDMI type A, 10-bit HD switchable. 1.6.2. 2 channel embedded audio. 1.7. Video Input Re-Sync: On all 8 HDMI inputs. 1.8. Frame Rate and Format Converters: On all 8 HDMI inputs. 1.9. HDMI Program Outputs: 2. 1.10. Ethernet: Supports 10/100/1000 BaseT for live streaming, software control, software updates and direct or network panel connection. 1.11. Computer Interface: 2 x USB Type-C 3.1 Gen 1 for external drive recording, webcam out, software control, software updates and panel connection.</p> <p>2. Standards. 2.1. HD Video Input Standards. 2.1.1. 720p50, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60, 1080i50, 1080i59.94, 1080i60. 2.2. HD Video Output Standards. 2.2.1. 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60. 2.3. Video Streaming Standards. 2.3.1. 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60. 2.4. Video Sampling: 4:2:2 YUV. 2.5. Color Precision: 10-bit. 2.6. Color Space: Rec 709. 2.7. HDMI Input Resolutions from Computers. 2.7.1. 1280 x 720p 50Hz, 59.94Hz and 60Hzj, 1920 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94 and 60Hz, 1920 x 1080i 50, 59.94Hz and 60Hz. 2.8. Colorspace Conversion: Hardware based real time.</p> <p>3. Live Production Features. 3.1. Upstream Keyers: 4. 3.2. Downstream Keyers: 2.</p>	1	unit	77590.00	77,590.00

- 3.3. Advanced Chroma Keyers: Up to 4.
- 3.4. Linear/Luma Keyers: Up to 4.
- 3.5. Transition Keyer: DVE.
- 3.6. Total Number of Layers: 9.
- 3.7. Pattern Generators: 5.
- 3.8. Color Generators: 2.
- 3.9. DVE With Borders and Drop Shadow: 2.
- 3.10. Interface: Minimum monitor resolution of 1366 x 768.

#### 4. Audio.

- 4.1. Audio Mixer.
  - 4.1.1. 11 input x 2 channel mixer.
  - 4.1.2. Selectable On/Off/Audio-Follow-Video per channel with separate gain control per channel.
  - 4.1.3. Level and Peak metering, Compressor, Gate, Limiter, 6 bands Parametric EQ, and Master gain control.
- 4.2. Analog Input: Unbalanced stereo.
- 4.3. Analog Input Delay: Up to 8 frames.
- 4.4. Input Impedance: 1.8k.
- 4.5. Max Input Level: +6dBV.
- 4.6. Mic Plug In Power: 2 x 3.5mm mini jack connections.

#### 5. Streaming.

- 5.1. Direct live streaming using Real Time Messaging Protocol (RTMP) over ethernet.
- 5.2. Shared mobile internet connection over USB-C.

#### 6. Recording.

- 6.1. Direct Recording Video and Audio: USB-C 3.1 Gen 1 port to external media.
- 6.2. Video Recording.
  - 6.2.1. 8 x HDMI ISO inputs as H.264 .mp4 files at up to 70Mb/s quality with AAC audio.
  - 6.2.2. 1 x Program out as H.264 .mp4 file at the streaming quality setting with AAC audio.
- 6.3. Audio Recording.
  - 6.3.1. 10 x 2 channel audio inputs recorded as separate 24-bit 48KHz .wav files.
  - 6.3.2. 2 x analog 2 channel audio inputs and 8 x HDMI 2 channel embedded audio inputs.
- 6.4. Switching.
  - 6.4.1. Program switching recording.
- 6.5. Media Format.
  - 6.5.1. Supports media formatted ExFAT (Windows/Mac) or HFS+ (Mac) file system.

#### 7. Multi View Monitoring.

- 7.1. Configurable to 16, 13, 10, 7 or 4 up views including Program, Preview, 8 HDMI inputs, Clean Feed, Media Player, Streaming Status, Recording Status and Audio Meters.
- 7.2. Multi View Video Standard: HD.

#### 8. Media Player.

- 8.1. Media Players: 2.
- 8.2. Channels. Fill and key for each Media Player.
- 8.3. Media Pool Still Image Capacity: 20 with fill and key.

	<p>8.4. Media Pool Still Image Format: PNG, TGA, BMP, GIF, JPEG and TIFF.</p> <p>9. Control.</p> <p>9.1. Control Panel.</p> <p>9.1.1. Built in control panel.</p> <p>9.1.2. Software control panel with camera control.</p> <p>9.1.2.1. Support for Windows 10 64 bit and Mac 11 Big Sur or later.</p> <p>9.1.3. Support for optional hardware panel.</p> <p>9.2. Control Panel Connection.</p> <p>9.2.1. Ethernet 10/100/1000 BaseT for direct connection between panel and chassis or via network.</p> <p>9.2.2. Direct USB-C connection.</p> <p>9.2.3. Ethernet or USB-C used for software updates.</p> <p>10. Operating Systems.</p> <p>10.1. Mac 11.1 Big Sur or later.</p> <p>10.2. Windows 10, 64-bit.</p> <p>11. Power.</p> <p>11.1. 1 x External 12V DC power supply.</p> <p>11.2. Power Usage: 36W.</p> <p>12. Warranty: 12 months.</p> <p>13. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>14. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
13	<p><b>Software License – Perpetual – Live Video Streaming Production</b></p> <p>1. Live video streaming production software.</p> <p>1.1. Real-time video switching between multiple live video cameras with dynamic mixing of other source media.</p> <p>1.2. Broadcast production for live or on-demand distribution to the web.</p> <p>2. Capture Sources.</p> <p>2.1. Cameras, microphones, webcams, IP cameras, or via mobile app (iOS).</p> <p>2.2. Audio capture.</p> <p>2.2.1. Windows.</p> <p>2.2.1.1. ASIO.</p> <p>2.2.1.2. WASAPI.</p> <p>2.2.1.3. DirectShow.</p> <p>2.2.2. Mac OS.</p> <p>2.2.2.1. AVFoundation.</p> <p>2.3. Cameras.</p> <p>2.3.1. General cameras.</p> <p>2.3.2. USB/Web cameras.</p> <p>2.3.3. PTZ/Robotic cameras.</p> <p>2.4. Capture cards.</p> <p>2.4.1. HDMI or SDI input from camcorders and DSLRs.</p> <p>2.5. Control surfaces.</p> <p>2.5.1. Support for generic MIDI controllers.</p> <p>2.6. Network Device Interface (NDI) sources.</p> <p>2.7. Screen capture.</p>	1	unit	66000.00	66,000.00



2.7.1. Application window or connected monitor's desktop.

2.7.2. Capture screens from other computers on local area network.

2.8. Web stream sources / IP cameras.

2.8.1. RTMP, RTMPS, RTMP(e), RTSP, HTTP, and MMS stream.

2.9. Output / playback (HDMI / SDI).

2.10. Conferencing and Remote Production.

2.10.1. Peer-to-peer conferencing.

3. Production.

3.1. Project and encoding resolution: up to 4096 x 3072.

3.2. Mixing layers: Five (5).

3.3. Built-in animated lower thirds title library.

3.4. Integrated text, chroma key and built-in transitions.

3.5. Custom transitions, playlists.

3.6. QR codes.

3.7. Audio mixer.

3.8. Multiple output destinations.

3.8.1. Multiple simultaneous record-to-disks.

3.8.2. Virtual camera and microphone output.

3.8.3. 1-4 slot multi-viewer output.

3.9. Replay, scoreboards, clocks, and timers.

3.10. Social Media Integration.

3.10.1. Built in Twitter comment curation and display.

3.10.2. Integrated Facebook polling.

3.10.3. Live viewer count.

3.11. Graphics and Titles.

3.11.1. Built-in Animated Title Library.

3.11.2. Integrated stock media library videos and images.

4. Stream.

4.1. Destinations.

4.1.1. Stream to Facebook Live, Twitter, YouTube, Vimeo Live or any destination via RTMP or SRT (caller mode).

4.1.2. Stream to more than one destination at a time.

4.2. Stream and record.

4.2.1. Stream and record at the same time.

4.2.2. Record MP4 or MOV files to any drive.

4.3. Multi-Viewer: 1-17 slot multi-viewer output.

4.4. Isolated (ISO) recording of individual sources.

4.4.1. Archive each live video input to a clean, unmodified file, separate from composited program recording.

4.5. Output Options.

4.5.1. Send program feed out via NDI, baseband SDI/HDMI, or secondary display out.

4.5.2. Virtual camera and microphone out.

4.5.3. 1-17 slot multiviewer.

5. Support.

5.1. Email support, stock media library access, and upgrades for one year.

5.2. Option to renew support.

6. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is

	earlier. 7. The aforementioned specifications are minimum requirements, unless otherwise stated.				
14	<p><b>Video Editing Software and Portable Editing Panel</b></p> <p>1. Video editing and compositing system supporting up to 8K resolution with a portable editing panel/keyboard.</p> <p>2. Video Editing Software.</p> <p>2.1. Non-linear video editing (NLE) and color correction application with support for 10-bit video.</p> <p>2.2. Modules.</p> <p>2.2.1. Media management.</p> <p>2.2.2. Cut.</p> <p>2.2.3. Edit.</p> <p>2.2.4. Audio.</p> <p>2.2.5. Compositing (effects and graphics).</p> <p>2.2.6. Color correction.</p> <p>2.2.7. Output.</p> <p>2.3. Perpetual license activation card/code.</p> <p>3. Video Editing Keyboard/Panel.</p> <p>3.1. Portable.</p> <p>3.2. Search dial.</p> <p>3.3. Transport control.</p> <p>3.4. 43 x pre-labeled keys.</p> <p>3.5. Connectivity.</p> <p>3.5.1. USB Type-C.</p> <p>3.5.2. Bluetooth.</p> <p>3.6. OS Compatibility.</p> <p>3.6.1. Windows 10 or later.</p> <p>3.6.2. Mac OS 10.15 or later.</p> <p>3.7. Power.</p> <p>3.7.1. Power source: USB.</p> <p>3.7.2. Power consumption: 4 W maximum.</p> <p>4. Warranty: 12 months.</p> <p>5. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>6. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>	1	unit	25500.00	25,500.00
15	<p><b>Video Assist Monitor – 7-inch – 3G-SDI / HDMI HD</b></p> <p>1. Display.</p> <p>1.1. Panel Type: OLED.</p> <p>1.2. Display Size: 7.0-inch / 17.8 cm.</p> <p>1.3. Aspect Ratio: 16:9.</p> <p>1.4. Viewing Angle: Horizontal: 178 degrees.</p> <p>1.5. Vertical: 178 degrees.</p> <p>1.6. Maximum Brightness: 2000 cd/m2.</p> <p>1.7. Contrast Ratio: 1200:1.</p> <p>1.8. Bit Depth / Color Support: 8-Bit+FRC (1.07 Billion Colors).</p> <p>1.9. Pixels Per Inch (ppi): 315 ppi.</p> <p>1.10. Real-Time LUT Monitoring: SDR.</p> <p>1.11. Image Controls.</p> <p>1.11.1. Check Field, Color Temperature Selection, Customizable Aspect Ratios, False Color, Focus Peaking, H/V Delay, Histogram, Image Flip, OSD Flip, Pixel-to-Pixel Zoom, R/G/B/Chroma Only, Screen</p>	2	unit	37100.00	74,200.00

	<p>Markers, Underscan, Waveform, Zebra.</p> <p>2. I/O.</p> <p>2.1. Video: 1 x BNC (3G-SDI) Input.</p> <p>2.2. 1 x BNC (3G-SDI) Output.</p> <p>2.3. 1 x HDMI Type A Input.</p> <p>2.4. 1 x HDMI Type A Output.</p> <p>2.5. Embedded Audio.</p> <p>2.5.1. SDI.</p> <p>2.5.2. HDMI.</p> <p>2.6. Audio: 1 x 1/8-inch / 3.5 mm Headphone Output.</p> <p>2.7. Power: 1 x D-Tap Input.</p> <p>2.8. 1 x Mini-XLR Input.</p> <p>2.9. Other I/O.</p> <p>2.9.1. 1 x USB 2.0 (USB Type-A).</p> <p>2.9.2. 1 x Tally (RJ45).</p> <p>3. Format Support.</p> <p>3.1. Video Format.</p> <p>3.1.1. HDMI (8-Bit).</p> <p>3.1.1.1. 1080p: 60/59.94/50/30/29.97/25/24/23.98.</p> <p>3.1.1.2. 1080PsF: 30/29.97/25/24/23.98.</p> <p>3.1.1.3. 1080i: 60/59.94/50.</p> <p>3.1.1.4. 720p: 59.94/50.</p> <p>3.1.1.5. 480i: 59.94.</p> <p>3.1.1.6. 576i: 50.</p> <p>3.2. Video Signal Conversion.</p> <p>3.2.1. HDMI to SDI.</p> <p>3.2.2. SDI to HDMI.</p> <p>4. Power.</p> <p>4.1. Battery Type: 1 x V-Mount.</p> <p>4.2. Power Consumption: 24 W maximum.</p> <p>5. Mounting.</p> <p>5.1. Mounting-Hole Pattern: 100 x 100 mm.</p> <p>5.2. Mounting: 4 x 1/4-inch-20 Female.</p> <p>6. Material of Construction: Aluminum.</p> <p>7. Warranty: 12 months.</p> <p>8. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.</p> <p>9. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
16	<p><b>Wireless Video Transmitter / Receiver – 400 ft – 3G-SDI / HDMI</b></p> <p>1. Wireless.</p> <p>1.1. Wireless Range.</p> <p>1.1.1. 400 ft / 121.92 m (Line-of-Sight).</p> <p>1.1.2. 300 ft / 91.4 m (Line-of-Sight).</p> <p>1.2. Channel Bandwidth: 20 MHz.</p> <p>1.3. Frequency Range: 5 GHz.</p> <p>1.4. Latency: 0.1 sec.</p> <p>1.5. RF Power: &lt; 21 dBm.</p> <p>1.6. RF Sensitivity: -80 dBm.</p> <p>1.7. Wireless Video Compression: Uncompressed.</p> <p>2. Interfaces.</p>	1	unit	46500.00	46,500.00

- 2.1. Transmitter Antenna Ports: 2 x RP-SMA Male.
- 2.2. Receiver Antenna Ports: 2 x RP-SMA Male.
- 2.3. Transmitter Video Connectors.
  - 2.3.1. 1 x BNC (3G-SDI / HD-SDI) Input.
  - 2.3.2. 1 x HDMI Input.
- 2.4. Receiver Video Connectors.
  - 2.4.1. 1 x BNC (3G-SDI) Output.
  - 2.4.2. 1 x HDMI Output.
- 2.5. Transmitter Other I/O: 1 x USB Type-C.
- 2.6. Receiver Other I/O: 1 x USB Type-C.
- 2.7. Embedded Audio: HDMI/SDI.
  
3. Format Support.
  - 3.1. Video Format.
    - 3.1.1. SDI/BNC.
      - 3.1.1.1. 1080p at 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 fps.
      - 3.1.1.2. 1080i at 50, 59.94, 60 fps.
      - 3.1.1.3. 1080PsF at 23.98, 24, 25 fps.
      - 3.1.1.4. 720p at 50, 59.94, 60 fps.
    - 3.1.2. HDMI.
      - 3.1.2.1. 1080p at 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 fps.
      - 3.1.2.2. 1080i at 50, 59.94, 60 fps.
      - 3.1.2.3. 720p at 50, 59.94, 60 fps.
      - 3.1.2.4. 576p at 50 fps.
      - 3.1.2.5. 480p at 60 fps.
  
4. Display.
  - 4.1. Transmitter Panel Type: OLED.
  - 4.2. Receiver Panel Type: OLED.
  
5. Power.
  - 5.1. Transmitter Battery Support: 1 x Sony L-Series / NP-F Type.
  - 5.2. Receiver Battery Support: 1 x Sony L-Series / NP-F Type.
  - 5.3. Transmitter Power Connector.
    - 5.3.1. 1 x Barrel (6 to 16 VDC up to 2 A) Input.
    - 5.3.2. 1 x USB Type-C (5 VDC up to 2 A) Input.
  - 5.4. Receiver Power Connector.
    - 5.4.1. 1 x Barrel (6 to 16 VDC up to 2 A) Input.
    - 5.4.2. 1 x USB Type-C (5 VDC up to 2 A) Input.
  - 5.5. Transmitter Power Consumption.
    - 5.5.1. Power Supply: 6 to 16 VDC (11 W).
  - 5.6. Receiver Power Consumption.
    - 5.6.1. Power Supply: 6 to 16 VDC (7 W).
  
6. General.
  - 6.1. Transmitter Mounting.
    - 6.1.1. 1 x 1/4 inch-20 Female.
    - 6.1.2. 1 x Cold Shoe.
  - 6.2. Receiver Mounting.
    - 6.2.1. 1 x 1/4 inch-20 Female.
    - 6.2.2. 1 x Cold Shoe.
  
7. Warranty: 12 months.
8. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.
9. The aforementioned specifications are minimum

	requirements, unless otherwise stated.				
17	<p><b>Boom Stand with Wheels – Light Stand Base 170 – 250 cm, Telescopic Crossarm 110 – 304 cm</b></p> <p>1. Material: Stainless Steel.  2. Telescopic Crossarm: 110 – 304 cm.  3. Light Stand Base: 170 – 250 cm.  4. Telescopic Arm Diameter: 35 / 30 / 25 cm.  5. Center Column Diameter: 40 / 35 cm.  6. Base Feet Size: 20 x 40 mm.  7. Wheels: 3.  8. Warranty: 12 months.  9. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.  10. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>	1	unit	16500.00	16,500.00
18	<p><b>Video Camera Fluid Head – Flat Base, 8kg Payload</b></p> <p>1. Camera Plate.  1.1. Quick release camera plate.  1.2. Camera Mounting Screw: 1 x 1/4-inch-20 Male with locating pin.</p> <p>2. Tripod Platform.  2.1. Base Mount: Flat Base.</p> <p>3. Pan and Tilt.  3.1. Drag Control.  3.1.1. Pan: Continuous.  3.1.2. Tilt: Continuous.  3.2. Drag Type: Fluid.  3.3. Vertical Tilt: +90 degrees to -70 degrees.  3.4. Panning Range: 360 degrees.  3.5. Independent Pan Lock.  3.6. Independent Tilt Lock.</p> <p>4. Physical.  4.1. Material: Aluminum.  4.2. Load Capacity: 0 to 17.6 lb / 0 to 8 kg.  4.3. Counterbalance: Continuous (0 to 17.6 lb / 0 to 7.98 kg).  4.4. Nitrogen piston mechanism.  4.5. Pan Bar.  4.6. Pan Handle Fittings: 2 x Rosette.  4.7. Bubble Level: 1 x Illuminated.  4.8. Accessory Mounting: 2 x 3/8-inch-16 Female Thread.</p> <p>5. Warranty: 12 months.  6. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.  7. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>	1	unit	28750.00	28,750.00
19	<p><b>Camera Tripod – Bowl Head, Single Tube, 20kg Payload</b></p> <p>1. General.  1.1. Head Mount Type: 75 mm Bowl.  1.2. Load Capacity: 44.09 lb / 20.00 kg.</p>	1	unit	58000.00	58,000.00

	<p>1.3. Maximum Working Height: 61.02 inch / 154.99 cm.  1.4. Minimum Working Height: 11.22 inch / 28.50 cm (without Spreader).  1.5. Folded Length: 28.94 inch / 73.51 cm.  1.6. Materials: Carbon Fiber.  1.7. Weight: 7.72 lb / 3.50 kg.</p> <p>2. Legs.  2.1. Leg Lock Type: Twist Lock.  2.2. Leg Positions: 3 Positions.  2.3. Support for independent leg spreader.  2.4. Leg Sections: 3.  2.5. Leg Diameter.  2.5.1. 0.8 inch / 20.32 mm.  2.5.2. 0.98 inch / 24.89 mm.  2.5.3. 1.15 inch / 29.21 mm.  2.6. Feet Features: Rubber.</p> <p>3. Warranty: 12 months.  4. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.  5. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>				
20	<p><b>Battery Power Station, 2-Bay, V-Mount – For Video Light – Point Source Bi-color LED – 200W</b>  1. Battery Input: 14.4V/14.8V V-Mount.  2. DC Output: 48V/10A, Maximum 480W.  3. 3-Pin locking output.  4. Compatibility: V-Mount Batteries.  5. Compatible with Video Light – Point Source Bi-color LED – 200W.  6. Built-In Clamp Quick Release Plate.  7. Capacity: Up to 2 batteries.  8. Inclusive of power cables.  9. Warranty: 12 months.  10. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.  11. The aforementioned specifications are minimum requirements, unless otherwise stated.</p>	1	unit	16500.00	16,500.00
21	<p><b>Timecode Generator Unit - Bluetooth</b>  1. Timecode generator.  1.1. Timecode sync, setup and monitoring over Bluetooth (iOS and Android).  1.2. Can act as Master Clock or Jam-Sync to any external timecode source.  1.3. Lockable Connector.</p> <p>2. Smartphone Apps: iOS, Android.  3. Timecode Support: LTC timecode according to SMPTE-12M standard.  4. Drift: &lt; 1 frame/24 hours.  5. SMPTE Timecode Rates:  23.98/24/25/29.97/29.97DF/30 fps.  6. Timecode Input and Output: 3.5 mm mic jack.  7. Audio: Built-in reference mic.</p> <p>8. Power.</p>	1	unit	16000.00	16,000.00

- 8.1. Built-In Battery: Lithium-ion polymer (LiPo).
- 8.2. Operating Time: Up to 35 hours.
- 8.3. Charging via USB Type-C: 1.5 hours (maximum).
  
- 9. Warranty: 12 months.
- 10. Delivery: 45 calendar days upon issuance of Notice to Proceed (NTP) or 20 December 2021, whichever is earlier.
- 11. The aforementioned specifications are minimum requirements, unless otherwise stated.

**TOTAL APPROVED BUDGET FOR THE CONTRACT:**

**Php 966,755.00**

### **GUIDELINES**

#### **A. Submission of Quotations**

1. Quotation/s shall include the Request for Quotation and/or the Purchase Request Number as state above;
2. Pictures or brand/model names or numbers, if applicable, should be specified in the quotation/s; and
3. Quotation/s must be signed by the company's duly authorized representative.

#### **B. Eligibility Requirements**

Pursuant to Annex "H" or Consolidated Guidelines for the Alternative Methods of Procurement of the 2016 Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184, as amended by Government Procurement Policy Board Resolution No. 21-2017 dated 30 May 2017, the following documents shall be submitted except for Repeat Order, Shopping under Section 52.1(a), and Negotiated Procurement under Sections 53.1 (Two-Failed Biddings), and 53.5 (Agency-to-Agency):

#### **For Procurement of Goods**

1. Upon submission of quotation
  - ✓ PhilGEPS Platinum Membership Certificate including Annex "A". If not available, the following alternate documents may be submitted:
    - PhilGEPS Registration Number
    - Mayor's Permit
      - For individuals/professionals engaged under Section 53.6, 53.7 and 53.9 of the 2016 IRR of RA No. 9184, only the Bureau of Internal Revenue (BIR) Certificate of Registration shall be submitted in lieu of the Mayor's Permit.
  
2. Upon issuance of Notice of Award (NOA)
  - ✓ Omnibus Sworn Statement
    - Applicable only for bidders who have submitted their quotation on item/s with a total Approved Budget for the Contract (ABC) of above Php50,000.00.
  - ✓ Income/Business Tax Return
    - Applicable only for: **a**) bidders who have submitted their quotation on item/s with a total ABC of above Php500,000.00; and **b**) bidders for Lease of Real Property and Venue (except for government agencies as lessors).

#### **For Procurement of Infrastructure**

1. The requirements for Goods with the same submission indicated therein; and
2. Valid Philippine Contractors Accreditation Board License.

#### **For Procurement of Consulting Services**

1. The requirements for Goods with the same submission indicated therein; and
2. Valid Professional Regulation Commission License or Curriculum Vitae.

**NOTE:** For new suppliers, submit a BIR Certificate of Registration for accounting purposes.

**C. Terms and Conditions**

1. Additional requirements, if necessary, may be requested by the BAC depending on the item to be bid;
2. For all kinds of procurement, the bidder who passed the bid evaluation, shall submit a duly notarized Omnibus Sworn Statement upon issuance of NOA, unless otherwise provided;
3. All transactions are subject to creditable withholding tax and final Value Added Tax or percentage tax per revenue regulation/s of the BIR;
4. A penalty of one-tenth of one percent (0.001) of the total value of the undelivered goods/services shall be charged as liquidated damages for every day of delay of the delivery; and
5. The DOST-ASTI reserves the right to accept or reject any proposal, to annul the bidding process, and to reject all proposals at any time prior to contract award, without thereby incurring any liability to the affected proponent or proponents.