

BY INTERNET/REGD BY POST

Sainik School Kalikiri
Kalikiri (Post), Chittoor Dist.
Andhra Pradesh-517 234

SSKAL/3006/QM/CCTV/2020

23 Dec 2020

(All contractors/firms)

NIT/CALL NOTICE: INVITING TENDERS FOR SUPPLY AND INSTALLATION OF CCTV CAMERAS ALONG WITH OFC AT SAINIK SCHOOL KALIKIRI

Dear Sir/Madam,

1. Bids are invited from registered vendors for supply and installation of CCTV Cameras along with OFC as per details mentioned at **Appendix "A"**. The tender document has been uploaded on school website (www.kalikirisainikschool.com). Tendering will be carried out by tendering mode. **The tenders will be opened at 1200hours on 13 Jan 2021. Critical dates for processing of tender are as follows:**

<u>Ser No</u>	<u>Nomenclature</u>	<u>Date</u>	<u>Time</u>
(a)	Published Date	23 Dec 2020	1200 hrs
(b)	Bid Download	23 Dec 2020	1200 hrs
(c)	Clarification Start Date	23 Dec 2020	1500 hrs
(d)	Clarification End Date	26 Dec 2020	1700 hrs
(e)	Pre-Bid meeting	28 Dec 2020	1000 hrs
(f)	Bid Submission Start	30 Dec 2020	1000 hrs
(g)	Bid Submission Ends	12 Jan 2021	1700 hrs
(h)	Bid Opening Start	13 Jan 2021	1200 hrs

2. **Pre-Qualification Criteria**. The requirements **to be eligible for bidding** are as follows:

(i) Bidder(s) should be the manufacturer / authorized dealer. 'Letter of Authorization' from Original Equipment Manufacturer (OEM)/Principal on the same and specific to this tender should be scanned and submitted along with technical offer.

(ii) In this tender, either the Indian agent on behalf of the Principal/Original Equipment Manufacturer (OEM) or Principal / OEM itself can bid but both cannot bid simultaneously for the same item. If an Indian agent submits bid on behalf of the Principal/Original Equipment Manufacturer (OEM), the same agent shall not submit a bid on behalf of another Principal/OEM in this tender.

(iii) **The authorized service centre of OEM should be located within a radius of 300km from Sainik School Kalikiri.**

3. **Manner of depositing the Bids**. It is requested that bid document be filled correctly and all pages to be duly signed personally by the bidder or his authorized signatory along with company rubber stamp. The name of person signing each page must be written clearly. Tenders in sealed cover duly super-scribed in bold letters – **'Quotations for supply and installation of CCTV Cameras along with OFC at Sainik School Kalikiri'** and Tender Enquiry reference, on a **two bid system** i.e. Technical Bid (**Envelope No.1**) and Commercial Bids (**Envelope No.2**), which should also be duly super-scribed. The contents of the Envelopes are enumerated in the following paragraphs:

(a) **Envelope No. 1 (Technical Bid)**. The Envelope 'No. 1', should contain the following documents:

(i) Valid proof of Company/firm Registration, including certificate of renewal of registration wherever applicable. Registered bidders (DGS&D, DGQA, NSIC, OFB or any other central registration authority) must enclose a duly authenticated copy of proof of registration.

(ii) Earnest money deposit is not required; however, bidders are requested to sign an undertaking as per **Appendix A** of RFP.

(iii) Proof of execution of at least three contracts previously with any Sainik School/ Indian Army/ Navy/ Air Force/IIT/IIM/ any Government / Reputed private Institutions.

(iv) **Tender Conditions Acceptance Certificate**. The bidder shall certify for acceptance of all the tender conditions of the RFP and furnish a certificate as per **Appendix 'B'** of RFP.

(v) Detail of PAN/ TIN Number.

(vi) GSTIN registration certificate of the firm, if applicable.

(vii) The bidder must have Annual Business Turnover of minimum Rs 40 lakhs in the last three financial years i.e. 2017-18, 2018-19, & 2019-20. (**Enclose copy of Audited Annual Accounts or Chartered Accountant certificate for turnover for the last three years**).

(viii) The bidder should have submitted filed ITR copy for last three years i.e. A.Y. 2017-18, A.Y. 2018-19, & A.Y. 2019-20 (**Enclose copy of Acknowledgement**).

(ix) A sum of Rs. 500/- (Rupees five hundred only) as Demand Draft is to be enclosed as cost of tender document.

(x) OEM Authorised certificate as per **Appendix 'C' of RFP**. Bidder should submit the necessary OEM certificate along-with the Bid, else the bid will not be considered. OEM certificate should also be mentioned that their **authorized service centre is located within a radius of 300km from Sainik School Kalikiri**.

(b) **Envelope No. 2 (Commercial Bids)**. To contain only commercial bids including the cost of the proposed item.

4. **Time and date for opening of Bid: 13 Jan 2021 on 1200Hrs.** If due to any exigency, the due date for opening of the Bids is declared a closed holiday, the Bids will be opened on the next working day at the same time or on any other day/time, as intimated by the Buyer.

5. **Location of the Tender Box: Administrative Office, Sainik School Kalikiri – 517 234.** Only those Bids dropped in the correct tender box will be opened. Bids dropped in the wrong tender Box will be rendered invalid.

6. **Place of opening of the Bids: Administrative Office, Sainik School Kalikiri – 517 234.** The Bidders may attend or depute their representatives, duly authorized in writing, to attend opening of Bids on the due date and time. Rates and important commercial/technical clauses quoted by all Bidders will be read out in the presence of the representatives of all the Bidders. This event will not be postponed due to non-presence of your representative. Any postponement to the date of opening of the Bid will be intimated to all concerned bidders whose bids are received in time. Any change to the last submission date, if admissible to the Buyer, will also be informed to all concerned bidders.

7. A sum of **Rs. 500/- (Rupees Five Hundred only)** as Demand Draft is to be enclosed as cost of tender document.

8. **Earnest Money Deposit:** No EMD required.

9. **Opening of Financial Bid (Envelop No.2).** Opening of the Second Cover bid (Envelop No.2) will be carried out only for those bidders clearing the Envelop No.1 evaluation, which is to contain the submission of only the financial bid through the duly filled **Appendix 'E'**.

10. **Determination of Lowest Bid.** The Lowest Bid will be decided on the basis of lowest rate.

11. **Negotiations.** The negotiations will be carried out with the L-1 Bidder as to be decided by the Procurement Committee. **Necessary intimation of time and date of Negotiations will be given to the respective L1 bidder after opening of financial bids through e-mail / telephone call.**

12. The principal reserves to himself the right of any amendment, cancellation and changes to the tender notice in whole or in part without assigning any reasons.

13. In case any firm is banned by the registering authority, it shall automatically be barred from participating in all further tendering activities.

14. You are requested to read the Notice Inviting Tender (NIT) and tender documents thoroughly and submit the bids of tender form along with its supporting documents duly completed without any mistake as per the instructions mentioned in the tender form.

15. **Security Deposit:** 3% of total contract value will be deposited as security deposit by the successful bidders within 15 days of award of contracts or prior to commencement of contracts whichever is earlier.

(Note : Financial bid of vendors/firms will be opened only after assessment of capability as stated above/found fit in technical bid).

Appendix "A"

TECHNICAL SPECIFICATIONS

NVR

<u>MAKE & MODEL</u>	<u>PRODUCT SPECIFICATIONS</u>
Video/Audio Input	IP Video Input: 64-ch Two-way Audio Input : 1-ch, BNC
Network	Incoming Bandwidth: 512Mbps Outgoing Bandwidth: 384Mbps Remote Users: 128 Protocols: P2P, UPnP, NTP, DHCP, PPPoE
Video/Audio Output	HDMI/VGA Output: VGA: 1920x1080p/60Hz, 1920x1080p/50Hz, 1600x1200/60Hz, 1280x1024/60Hz, 1280x720/60Hz, 1024x768/60Hz HDMI1: 4K (3840x2160)/30Hz, 1920x1080p/60Hz, 1920x1080p/50Hz, 1600x1200/60Hz, 1280x1024/60Hz, 1280x720/60Hz, 1024x768/60Hz HDMI2: 4K (3840x2160)/30Hz, 1920x1080p/60Hz, 1920x1080p/50Hz, 1600x1200/60Hz, 1280x1024/60Hz, 1280x720/60Hz, 1024x768/60Hz Recording Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF Audio Output : 1-ch, BNC Synchronous Playback: 16-ch Corridor Mode Screen: 3/4/5/7/9/10/12/16/32
Decoding	Decoding format: Ultra 265, H.265, H.264 Live view/Playback: 12MP/8MP/6MP/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF Capability: 4 x 12MP@20, 4 x 4K@30, 16 x 1080p@30, 36 x 720p@30, 64 x D1
Hard Disk	SATA: 16 SATA interfaces Capacity : up to 10TB for each HDD eSATA 1 eSATA : interface miniSAS: 2 miniSAS ports
Smart	VCA Detection : Face detection, Intrusion detection, Cross line detection, Audio detection, Defocus detection, Scene change detection, Auto tracking VCA Search: Face search, Behavior search Statistical Analysis: People counting
Disk Array	Array Type RAID 0/1/5/6/10/50/60
External Interface	Network Interface: 4 RJ-45 10M/100M/1000M adaptive Ethernet Interface 2 1000M SFP Ethernet Interface Serial Interface: 1 x RS232, 1 x RS485 USB Interface: Rear panel: 4 x USB3.0 Alarm In: 24-ch Alarm Out: 8-ch Decoding Card (optional): 2 slots (4-ch HDMI or 6-ch HDMI outputs per card) Power Output: 12V

General	Power Supply: 100 ~ 240V AC Power Consumption: ≤ 50 W (without HDD) Working Environment: -10°C ~ + 55°C (+14°F ~ +131°F), Humidity ≤ 90% RH (non-condensing) Chassis: 19-inch rack-mounted 3U chassis Dimensions: 482mm × 477mm × 131mm (18.8" × 19.0" × 5.1") Weight: (without HDD) ≤ 10 Kg (22.05 lb)
Warranty & Support Services	1-Year Limited Hardware Warranty and 1-year NBD On-Site Service after Remote Diagnosis

PTZ CAMERAS

<u>MAKE & MODEL</u>	<u>PRODUCT SPECIFICATIONS</u>										
Camera	Sensor: 1/1.8", 2.0 megapixel, progressive scan, CMOS Lens: 5.7 ~ 216.6mm, AF automatic focusing and motorized zoom lens Digital Zoom: 16 Optical Zoom: 38 DORI Distance: Lens (mm) , Detect (m), Observe (m), Recognize (m), Identify (m) <table style="margin-left: 100px; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">5.7</td> <td style="padding-right: 20px;">68.4</td> <td style="padding-right: 20px;">27.4</td> <td style="padding-right: 20px;">17.7</td> <td style="padding-right: 20px;">6.8</td> </tr> <tr> <td>216.6</td> <td>2599.2</td> <td>1039.7</td> <td>519.8</td> <td>259.9</td> </tr> </table> Angle of View (H) : 58.4°~ 2.1° Angle of View (V) : 42.6°~ 1.3° Angle of View (O) : 71.8°~ 2.4° Shutter: Auto/Manual; shutter time: 1 ~ 1/100000s Minimum Illumination: Colour: 0.0005Lux (F1.5, AGC ON) 0Lux with IR Iris: Auto/Manual; F1.5 ~ F4.5 Day/Night: IR-cut filter with auto switch (ICR) Digital noise reduction : 2D/3D DNR S/N: >52dB IR Range: UP to 250m (820ft) Defog : Optical Defog & Digital Defog WDR : 120Db	5.7	68.4	27.4	17.7	6.8	216.6	2599.2	1039.7	519.8	259.9
5.7	68.4	27.4	17.7	6.8							
216.6	2599.2	1039.7	519.8	259.9							
Video	Video Compression: Ultra 265, H.265, H.264, MJPEG H.264 code profile: Baseline profile, Main Profile, High Profile Frame Rate: Main Stream: 2MP (1920*1080), Max 60fps; Sub Stream: 2MP (1920*1080), Max 60fps; Third Stream: D1 (720*576), Max 60fps HLC: Supported BLC: Supported EIS: Supported OSD: Up to 8 OSDs Privacy Mask: Up to 24 areas ROI: Up to 8 areas Motion Detection: Up to 4 areas										
Smart	General Function: Watermark, IP Address Filtering, Tampering Alarm, Alarm input, Alarm output, Access Policy, ARP Protection, RTSP Authentication, User Authentication										
Audio	Audio Compression: G.711 Two-way audio: Supported Suppression: Supported Sampling Rate: 8KHZ										
Storage	Edge Storage: Micro SD, up to 256GB Network Storage: ANR										

Network	Protocols: IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, 802.1x, SNMP, QoS Compatible Integration: ONVIF (Profile S, Profile G, Profile T), API
Pan & Tilt	Pan Range: 360° (endless) Pan Speed: 0.1°/s ~ 240°/s Preset speed: 300°/s Tilt Range: -20° ~ 90° (auto reverse) Tilt Speed: 0.1° ~ 160°/s Preset speed: 240°/s Number of Presets: 1024 Patrol: Preset patrol, route patrol, recorded patrol Home Position: Supported
Interface	Audio I/O: Audio cable: Input: impedance 35kΩ; amplitude 2V [p-p] Output: impedance 600Ω; amplitude 2V [p-p] Alarm I/O: 2/1 Serial Port: 1 RS485 Network: 1 RJ45 10M/100M/1000M Base-TX Ethernet SFP Base-TX Ethernet Video Output: 1 BNC, impedance 75Ω; amplitude 1V [p-p]
General	Power: AC 24V (Default)±25%, DC 24V±25% Power consumption: 16 ~ 51W Dimensions: (∅ x H) ∅270 x 496.7mm (∅10.6" x 19.6") Weight: 9.69kg (21.4lb) Working Environment: -40°C ~ 70°C (-40°F ~ 158°F), Humidity: ≤95% RH (non-condensing) Ingress Protection: IP66 Reset Button: Supported
Warranty & Support Services	3-Year Limited Hardware Warranty and 3-year NBD On-Site Service after Remote Diagnosis

BULLET CAMERAS

<u>MAKE & MODEL</u>	<u>PRODUCT SPECIFICATIONS</u>																
Camera	<p>Sensor 1/2.7", 5.0 megapixel, progressive scan, CMOS Lens 2.7 ~ 13.5mm, AF automatic focusing and motorized zoom lens DORI Distance Lens(mm), Detect(m), Observe (m), Recognize (m), Identify (m)</p> <table style="margin-left: 40px;"> <tr> <td style="text-align: center;">2.7</td> <td style="text-align: center;">60.8</td> <td style="text-align: center;">24.3</td> <td style="text-align: center;">12.2</td> </tr> <tr> <td style="text-align: center;">6.1</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">13.5</td> <td style="text-align: center;">303.8</td> <td style="text-align: center;">121.5</td> <td style="text-align: center;">60.8</td> </tr> <tr> <td style="text-align: center;">30.4</td> <td></td> <td></td> <td></td> </tr> </table> <p>Angle of View (H) 106.25°~ 30.42° Angle of View (V) 56.36°~ 17.22° Angle of View (O) 110.34°~34.18° Adjustment angle Pan: 0° ~ 355° Tilt: 0° ~ 80° Rotate: 0° ~ 355° Shutter Auto/Manual, 1 ~ 1/100000s Minimum Illumination Colour:0.002 Lux (F1.35, AGC ON) 0Lux with IR Day/Night IR-cut filter with auto switch (ICR) Digital Noise Reduction 2D/3D DNR S/N >56dB IR Range Up to 40m (131ft) IR range Wavelength 850nm IR On/Off Control Auto/Manual Defog Digital Defog WDR 120dB</p>	2.7	60.8	24.3	12.2	6.1				13.5	303.8	121.5	60.8	30.4			
2.7	60.8	24.3	12.2														
6.1																	
13.5	303.8	121.5	60.8														
30.4																	

Video	<p>Video Compression Ultra 265, H.265, H.264, MJPEG H.264 code profile Baseline profile, Main profile, High profile Frame Rate Main Stream:5MP (2880*1620), Max 25fps; 4MP (2560*1440), Max 25fps; 3MP (2304*1296), Max 25fps; 1080P (1920*1080), Max 30fps; Sub Stream: D1 (720*576), Max 30fps; Third Stream: CIF (352*288), Max 30fps Video Bit Rate 128 Kbps~16 Mbps OSD Up to 8 OSDs Privacy Mask Up to 4 areas ROI Up to 8 areas Motion Detection Up to 4 areas</p>
Image	<p>White Balance Auto/Outdoor/Fine Tune/Sodium Lamp/Locked/Auto2 Smart IR Support Flip Normal/Vertical/Horizontal/180°/90°Clockwise/90°Anti-clockwise Dewarping N\A HLC Supported BLC Supported</p>
Audio	<p>Audio Compression G.711Two-way audio SupportedSuppression SupportedSampling Rate 8KHZ</p>
Storage	<p>Edge Storage Micro SD, up to 256GB Network Storage ANR</p>
Network	<p>Protocols IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SSL Compatible Integration ONVIF (Profile S, Profile G, Profile T), API Client EZ Station EZ View EZ Live Web Browser Plug-in required live view: IE9+, Chrome 41 and below, Firefox 52 and below Plug-in free live view: Chorme 57.0+, Firefox 58.0+, Edge 16+, Safari 11+</p>
Interface	<p>Audio I/O Input: impedance 35kΩ; amplitude 2V [p-p] Output: impedance 600Ω; amplitude 2V [p-p] Alarm I/O 1/1 Built-in Mic Supported Network 1 RJ45 10M/100M Base-TX Ethernet</p>
Certifications	<p>CE: EN 60950-1 UL: UL60950-1 FCC: FCC Part 15</p>
General	<p>Power DC 12V±25%, PoE (IEEE 802.3af) Power consumption: Max 7.0 W Dimensions (∅ x H) Φ148 x 111mm (∅ 5.8" x 4.4") Net Weight 0.97kg (2.12lb) Material Metal + Plastic Working Environment -30°C ~ 60°C (-22°F ~ 140°F), Humidity: ≤95% RH (non-condensing) Storage Environment -30°C ~ 60°C (-22°F ~ 140°F), Humidity: ≤95% RH (non-condensing) Surge Protection 6KV Reset Button Supported Ingress Protection IP67 Vandal Resistant IK10 Reset Button Supported</p>
Warranty & Support Services	<p>3-Year Limited Hardware Warranty and 3-year NBD On-Site Service after Remote Diagnosis</p>

DOME CAMERAS

<u>MAKE & MODEL</u>	<u>PRODUCT SPECIFICATIONS</u>										
Camera	1/3", 4.0 megapixel, progressive scan, CMOS Lens 2.8mm@f2.0, DORI Distance Lens(mm), Detect(m), Observe (m), Recognize (m), Identify (m) <table style="margin-left: 100px; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">2.8</td> <td style="padding-right: 20px;">63.0</td> <td style="padding-right: 20px;">25.2</td> <td style="padding-right: 20px;">12.6</td> <td style="padding-right: 20px;">6.3</td> </tr> <tr> <td>4.0</td> <td>90.0</td> <td>36.0</td> <td>18.0</td> <td>9.0</td> </tr> </table> Angle of View (H) 95.8° Angle of View (V) 55.2° Angle of View (O) 124.5° Adjustment angle PanPan: 3° ~ 360° Tilt: 0° ~ 68° Rotate: 3° ~ 360° Shutter Auto/Manual, 1 ~ 1/100000s Minimum Illumination Colour: 0.01Lux (F2.0, AGC ON) 0Lux with IR Day/Night IR-cut filter with auto switch (ICR) Digital Noise Reduction 2D/3D DNR S/N >56dB IR Range Up to 40m (131ft) IR range Wavelength 850nm IR On/Off Control Auto/Manual Defog Digital Defog WDR 120dB	2.8	63.0	25.2	12.6	6.3	4.0	90.0	36.0	18.0	9.0
2.8	63.0	25.2	12.6	6.3							
4.0	90.0	36.0	18.0	9.0							
Video	Video Compression Ultra 265, H.265, H.264, MJPEG H.264 code profile Baseline profile, Main profile, High profile Frame Rate Main Stream:5MP (2880*1620), Max 25fps; 4MP (2560*1440), Max 25fps; 3MP (2304*1296), Max 25fps; 1080P (1920*1080), Max 30fps; Sub Stream: D1 (720*576), Max 30fps; Third Stream: CIF (352*288), Max 30fps Video Bit Rate 128 Kbps~16 Mbps OSD Up to 8 OSDs Privacy Mask Up to 4 areas ROI Up to 8 areas Motion Detection Up to 4 areas										
Image	White Balance Auto/Outdoor/Fine Tune/Sodium Lamp/Locked/Auto2 Smart IR Support Flip Normal/Vertical/Horizontal/180°/90°Clockwise/90°Anti-clockwise Dewarping N\A HLC Supported BLC Supported										
Audio	Audio Compression G.711 Two-way audio Supported Suppression Supported Sampling Rate 8KHZ										
Storage	Edge Storage Micro SD, up to 256GB Network Storage ANR										
Network	Protocols IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SSL Compatible Integration ONVIF (Profile S, Profile G, Profile T), API Client EZStation EZView EZLive Web Browser Plug-in required live view: IE9+, Chrome 41 and below, Firefox 52 and below Plug-in free live view: Chrome 57.0+, Firefox 58.0+, Edge 16+, Safari 11+										

Interface	Audio I/O Input: impedance 35kΩ; amplitude 2V [p-p] Output: impedance 600Ω; amplitude 2V [p-p] Alarm I/O 1/1 Built-in Mic Supported Network 1 RJ45 10M/100M Base-TX Ethernet
Certifications	CE: EN 60950-1 UL: UL60950-1 FCC: FCC Part 15
General	Power DC 12V±25%, PoE (IEEE 802.3af) Power consumption: Max 7.0 W Dimensions (Ø x H) Ø148 x 111mm (Ø 5.8" x 4.4") Net Weight 0.97kg (2.12lb) Material Metal + Plastic Working Environment -30°C ~ 60°C (-22°F ~ 140°F), Humidity: ≤95% RH (non-condensing) Storage Environment -30°C ~ 60°C (-22°F ~ 140°F), Humidity: ≤95% RH (non-condensing) Surge Protection 6KV Reset Button Supported Ingress Protection IP67 Vandal Resistant IK10 Reset Button Supported
Warranty & Support Services	3-Year Limited Hardware Warranty and 3-year NBD On-Site Service after Remote Diagnosis

LED PANEL SPECIFICATIONS

Diagonal Size	49
Type	Edge LED BLU
Resolution	3840*2160 (4K UHD)
Pixel Pitch(mm)	0.093 x 0.279
Active Display Area(mm)	1073.78(H) x 604.00(V)
Brightness(Typ.)	350 nit
Contrast Ratio	4000:1
Viewing Angle(H/V)	178/178
Response Time(G-to-G)	8ms(Typ.)
Display Colors	16.7M(True Display) 1.07B(Ditherd 10bit)
Color Gamut	92% (DCI-P3, CIE 1976)
Operation Hour	16/7
Haze	2%
Display	
Dynamic C/R	MEGA
H-Scanning Frequency	30 ~ 81kHz
V-Scanning Frequency	48 ~ 75Hz
Maximum Pixel Frequency	594MHz
Sound	
Speaker Type	Built in Speaker(10W + 10W)
Connectivity	
Input	
RGB	DVI-D
Video	HDMI 2.0 (2)
HDCP	HDCP 2.2
Audio	Stereo Mini Jack, DVI/HDMI/Audio(Common)
USB	USB 2.0 x 2
Output	
Audio	Stereo Mini Jack
External Control	RS232C(in/out) thru stereo jack, RJ45
External Sensor	IR
Power	
Type	Internal

Power Supply	AC 100 - 240 V~ (+/- 10 %), 50/60 Hz
Power Consumption	
Max[W/h]	138
Typical[W/h]	103
Rating[W/h]	125
BTU(Max)	470.5
Sleep mode	0.5
Mechanical Specification	
Dimension (mm)	
Set	1099.2 x 631.5 x 46.3
Package	1247 x 772 x 152
Weight (kg)	
Set	13.5
Package	18
Stand Type	Foot Stand (Optional)
Bezel Width (mm)	9.2mm(U/L/R), 11.2mm(B)
Operation	
Operating Temperature	0 °C ~ 40 °C
Humidity	10 % ~ 80 %
Feature	
Key Features	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, SSSP 6.0
Special Features	H/W: Temperature Sensor,Pivot Display, Clock Battery(168hrs Clock Keeping), Built in Speaker(10W 2ch), IP5x, Wi-Fi/BT S/W: Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)
Internal Player	
Processor	Coretex A72 1.7GHz Quad-Core CPU
On-Chip Cache Memory	L1 Instruction Cache : 48KB L1 Data Cache : 32KB L2 Cache : 2MB
Clock Speed	1.7GHz
Main Memory Interface	2.5GB LPDDR4 1.5GHz 64bit
Graphics	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale up from graphic processing result.)
Storage (FDM)	8GB (3.88GB Occupied by O/S, 4.12GB Available)
Multimedia	*Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG
IO Ports	USB 2.0
Operating System	Tizen 4.0 (VDLinux)
Certification	
Safety	60950-1
EMC	Class B
Security	802.1x(WPA2 Enterprise): EAP-TLS, EAP-TTLS, EAP-PEAP
Accessory	
Included	Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries
Optional	
Stand	STN-L4355F
Mount	WMN4070SE
Specialty	CML400XK
Media Player	
Media Player	N/A