IBA
Institute of
Business Administration
Karachi

Leadership and Ideas for Tomorrow

PURCHASE ORDER

To	:	M/s Digital Links (Pvt) Ltd
Order No	:	IBA-MC/PD/P&S/205/0079/2015-16
Date of Issue	:	November 25, 2015
Date of Delivery	:	December 8, 2015
Place of Delivery	:	IBA, Main Campus
Total Amount	:	**Rs.1,250,782.65 (Including GST)**
		(Rupees One Million Two Hundred Fifty Thousand Seven Hundred Eighty Two & Paisa Sixty Five Only)

S. #	DESCRIPTION	QTY	RATE (RS.)	AMOUNT (RS.)
1	**IP CAMERA- MINI DOME - 1.3 MP HIK VISION** 1. Support dual stream, and the sub-stream for mobile surveillance 2. High-performance and long service life infrared LED. Approx. 10 to 30 meters IR range 3. Must Support intrusion detection, line crossing detection 4. Must Support VCA, which is compatible with NVR for the second time of video searching and analyzing 5. Up to 1.3 megapixel (1280 × 960) resolution 6. Wi-Fi Support 7. Standard video compression with high compression ratio, ROI (region of interest) encoding 8. Progressive scan CMOS, capture motion video without incised margin 9. Built-in Micro SD/SDHC/SDXC card slot, up to 128 GB 10. Ingress Protection level: IP66 11. Two-way audio Support 12. Audio Support Input Output 13. IR cut filter with auto switch 14. PoE (Power over Ethernet) 15. Impact Protection: IEC60068-2-75 test, Eh. 20J; EN50102, up to IK10 16. Other functions: rotate mode, alarm, mirror, reset button, etc 17. Image Sensor: 1/3" Progressive Scan CMOS 18. Min. Illumination: 0.01Lux @ (F1.2, AGC ON) ,0 Lux with IR, 0.028 Lux @ (F2.0, AGC ON) ,0 Lux with IR 19. Shutter Speed: 1/3 s to 1/100,000 s 20. Lens: Angle of view: 92.5°@2.8mm LENS	42 units	Rs.14,435.00	Rs.606,270.00

21. Lens Mount: M12
22. Day &Night: IR cut filter with auto switch
23. Digital Noise Reduction: 3D DNR
24. Wide Dynamic Range: Digital WDR
25. Angle Adjustment: Pan:0° -
    355°, Tilt: 0° - 75°, Rotation: 0-355°
26. Video Compression   H.264+
27. H.264 Type: Main Profile
28. Video Bit Rate:32 Kbps – 12 Mbps
29. Dual Stream: Yes
30. Audio Compression:
            G.711/G.722.1/G.726/MP2L2
31. Audio Bit Rate: 64Kbps(G.711)
    /16Kbps(G.722.1)/16Kbps(G.726) /32-
    128Kbps(MP2L2)
32. Max. Resolution: 1280 x 960
33. Frame Rate: 50 Hz: 25 fps (1280
    × 960), 25 fps (1280 x 720)
    60 Hz: 30 fps (1280 × 960), 30 fps (1280 ×
    720)
34. Image Settings: Rotate mode, Saturation,
    Brightness, Contrast adjustable
    by client software or web browser
35. Backlight compensation: Yes, zone
    optional
36. ROI: (Region of interest)   Support
37. Line crossing Detection Support

38. Network Storage:Local storage: Built-in
    Micro SD/SDHC/SDXC card slot, up to
    128 GB.
39. NAS: Must Supported NAS (Support NFS,
    SMB/CIFS)
40. Protocol:TCP/IP,ICMP,HTTP,HTTPS,FTP,D
    HCP,DNS,DDNS
    RTP,RTSP,RTCP.   PPPoE, NTP, UPnP,
    SMTP,SNMP
    PPPoE,NTP,UPnP,SMTP,SNMP,IGMP
    802.1X,QoS,IPv6,Bonjour
41. Standard: ONVIF, PSIA, CGI, ISAPI
42. Communication Interface: 1 RJ45
    10M/100M Ethernet interface
43. Alarm interface: 1 alarm I/O
44. Audio interface:1 audio I/O

45. Wireless Standards:
            IEEE802.11b, 802.11g, 802.11n
46. Frequency Range: 2.4 GHz – 2.4835
    GHz
47. Channel Bandwidth: 20/40MHz Support
48. Protocols: 802.11b: CCK, QPSK,
    BPSK
49. 802.11g/n: OFDM
50. Security: 64/128-bit WEP,
    WPA/WPA2, WPA-PSK/WPA2-PSK, WPS
51. Transmit Output Power: 11b:
    17±1.5dBm @ 11Mbps
            11g: 14±1.5dBm @ 54Mbps
            11n: 12.5±1.5dBm

	Description	Qty	Unit Price	Total

	52. Receive Sensitivity: 11b: -90dBm @ 11Mbps (Typical)
	11g: -75dBm @ 54Mpbs (Typical)
	11n: -74dBm (Typical)
	53. Transfer Rates: 11b: 11Mbps
	11g: 54Mbps
	11n: up to 150Mbps
	54. Wireless Range:50m (minimum)
	55. Wireless Standards: IEEE802.11b, 802.11g, 802.11n
	56. Operating Conditions: -30 °C – 60 °C (-22 °F – 140 °F)
	57. Humidity: 95% or less (non-condensing)
	58. Power Supply: 12 V DC ± 10%
	59. PoE: (802.3af)
	60. Power Consumption: Max. 5W
	61. Ingress Protection level:IP66
	62. IR Range: 30 meters
	63. Impact Protection: IEC60068-2-75Eh, 20J; EN50102, up to IK10
	64. Dimensions: Φ111 × 82 (4.4" × 3.2")
	65. Weight:500g (1.1 lb)
	65. Alarm Trigger:
	Line Crossing, Intrusion Detection, Motion detection.
	Dynamic analysis, Tampering, alarm, One-key reset.
	Network disconnect, IP address conflict, Storage exception, Flash-prevention, dual stream, heartbeat,
	mirror, password protection, privacy mask, watermark, IP address filtering.
	
	66. The camera Box should include following items:-
	  a. IP Camera
	  b. Power Adaptor 220 v
	  c. Screw driver L Key type for camera
	  d. Weather proof network connector cover
	  e. Camera manual
	  f. Packing
	67. Power supply should be included on each camera.			

2	**NVR – 32 channel HIK VISION** 1. Connectable to the third-party network cameras like like ACTI, Arecont, AXIS, Bosch, Brickcom, Canon, ONVIF, PANASONIC, Pelco, PSIA, SAMSUNG, SANYO, SONY and Vivotek and ZAVIO. 2. Video Content Analysis: NVR Should support VCA for smart search 3. Stream Media Server: NVR should support Stream Media Server to increase the number of users on Network or to decrease the load	05 units	Rs.68,750.00	Rs.343,750.00

	over WAN connection for multiple users at remote location 4. Up to 64 network cameras can be connected 5. Support live view, storage, and playback of the connected camera with up to the resolution of 5 megapixels. 6. Simultaneous HDMI and VGA at 1920 × 1080 resolution. 7. New GUI and support starting record with one key; 8. Redundant recording, holiday recording and capture schedule configuration; 9. Realize instant playback for assigned channel during multi-channel display mode. 10. Up to 16-ch synchronous playback at 4CIF resolution. 11. Smart search for the selected area in the video. 12. Customization of tags, searching, and playing back by tags. 13. Locking and unlocking record files. 14. Compression: "H.264+" (NVR Should not be H.264 or below) 15. Support HDD quota and group modes; different capacity can be assigned to different channel. 16. Up to 4 SATA hard disks and 1 eSATA disk can be connected, for both recording and backup. 17. 1 self-adaptive 10M/100M/1000M network interface. 18. Support Hikvision DDNS (Dynamic Domain Name System); 19. Must Support Channel-zero encoding, which enables you to get a view in the remote client or web browser of all the channels in one screen. 20. Support network detection, including network delay, packet loss, etc. 21. Adopt pioneering dual-OS design to ensure the security of system running. 22. Channel Zero: NVR Should Support Channel Zero function with VBR function i.e. (32Kbps ~ 2Mbps) which sucks one camera bandwidth and shows at most 16-cameras View at a time 23. VGA/HDMI or CVBS: NVR should independently operate (VGA/HDMI) & CVBS 24. IP video/Audio input : 32-ch 25. Two-way audio: 1-ch, BNC (2.0 Vp-p, $1k\Omega$) 26. Incoming bandwidth: 160Mbps 27. Outgoing bandwidth: 160Mbps 28. Remote Connection: 128 29. Video/Audio output: 32 30. Recording resolution 5MP /3MP /1080P/UXGA /720P /VGA /4CIF /DCIF /2CIF /CIF /QCIF 31. Compression: "H.264+" (NVR Should not be H.264 or below) 32. Channel Zero: NVR Should Support Channel		

Zero function with VBR ability i.e. (32Kbps ~ 2Mbps) which sucks one camera bandwidth and shows at most 16-cameras View at a time	
33. VGA/HDMI or CVBS: NVR should independently operate (VGA/HDMI) & CVBS	
34. Video Content Analysis: NVR Should support VCA for smart search	
35. Stream Media Server: NVR should support Stream Media Server to increase the number of users on Network or to decrease the load over WAN connection for multiple users at remote location	
36. NAS: NVR should support NAS function	
37. Frame rate: Main stream: 25 fps (P) / 30 fps (N)	
1. Sub-stream: 25 fps (P) / 30 fps (N)	
38. CVBS output: 1-ch, BNC (1.0 Vp-p, 75 Ω)	
39. Resolution: 704 × 576 (PAL); 704 × 480 (NTSC)	
40. HDMI output: 1-ch, resolution: 1920 × 1080P /60Hz, 1920 × 1080P /50Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
41. VGA output: 1-ch, resolution: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
42. Audio output: 2-ch, BNC (Linear, 600Ω)	
43. Playback resolution 5MP /3MP /1080P /UXGA /720P /VGA /4CIF /DCIF /2CIF /CIF /QCIF	
44. Synchronous playback: 16-ch	
45. Hard disk (SATA) 4 SATA interfaces	
46. eSATA 1 eSATA interface	
47. Capacity: Up to 4TB capacity for each HDD	
48. Network interface: 1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet	
49. Serial interface: RS-232; RS-485; Keyboard	
50. USB interface: 3 × USB 2.0	
51. Alarm in: 16	
52. Alarm out: 4	
53. Power supply: 100 ~ 240 VAC, 6.3 A, 50 ~ 60 Hz	
54. Power Consumption: (without hard disk) ≤ 45 W	
55. Working temperature: -10 °C ~ +55 °C	
56. Working humidity: 10 % ~ 90 %	
57. Chassis 19-inch rack-mounted 1.5U chassis	
58. Dimensions (W × D × H) 445 × 390 ×70 mm	
59. Weight ≤ 4 Kg (8.82 lb) (without hard disk)	

3	**LED– 32 channel SAMSUNG** Display Technology LED 1. 2D/3D 2D 2. Internet Enabled No 3. Refresh Rate EMR 120Hz 4. Aspect Ratio 16:9 5. Resolution 720p or higher 6. Energy Grade Energy Star 7. Category LED TV 8. Brightness (cd/m2) 250 9. Contrast Ratio 1200:1 or better 10. Response Time 6.5ms 11. Viewing Angle (H/V) 170°/170° 12. Life Time >30,000hrs (min) 13. Colors 16.7M 14. Speakers Integrated speakers (Bottom side) 15. Audio Power Output 5W+5W 16. SRS True Surround HD Yes 17. HDMI 2 18. USB 1 19. AV in 1 20. AV out 1 21. RF 1 22. Component (Y/Pb/Pr) 1 23. VGA 1 24. SPDIF Coaxial 25. 3D Glasses No 26. Power Supply AC 220V 50/60Hz 27. Power Consumption - TV on 50W 28. Power Consumption – Standby <0.5W	3 unit	Rs.39,675.00	Rs.119,025.00
	Total			Rs.1,069,045.00
	17% GST			Rs.181,737.65
	Total Amount			Rs.1,250,782.65

General Instructions:-

- All the items should be available in ready stock and displayed in front of the end user.
- No un marked items acceptable
- No Neutral version and Chinese version acceptable.
- Supplier should have office located in Karachi.
- Items should have local warranty.

Terms & Conditions:

1. Material of this order is subject to final inspection at the time of delivery.
2. We reserve the right to cancel any or all the above items if material is not in accordance with our specification or if the delivery is delayed.
3. Payment will be made through crossed cheque after the receipt of the bill and delivery of the above item.
4. General Sales Tax will be paid on applicable items only.
5. Penalty at the rate of 2% per month on actual will be imposed on delayed delivery.
6. The rate / item cost is final and no change what so ever will be accepted.
7. Government tax(es), levi(es) and charge(s) will be charged at actual as per SRO.
8. Competent Authority reserves the right to change / alter / remove any item or article or reduce / enhance quantity without assigning any reason.
9. Invoice / bill, Purchase Order & Delivery Challan should be submitted to Finance Department.
10. Advance Payment subject to Bank Guarantee
11. All Government taxes (including Income tax and stamp duty), levies and charges will be charged as per applicable rates / denomination of Purchase / Work Order.
12. Stamp duty 0.35% for Goods against total value of Purchase Order will be levied accordingly.

Manager Purchase & Stores

NOV 25/15

Registrar