

Specificații tehnice F 4.1

[Acest tabel va fi completat de către ofertant în coloanele 3, 4, 5, 7, iar de către autoritatea contractantă – în coloanele 1, 2, 6, 8]

Numărul procedurii de achiziție <u>ocds-b3wdp1-MD-1715158457274</u> din <u>8 mai 2024</u>
Denumirea procedurii de achiziție: Servicii de modernizare a sistemului video din sectorul Buiucani și crearea centrului de monitorizare locală în incinta clădirii Preturii Sectorului Buiucani.

Cod CPV	Denumirea bunurilor	Modelul articolului	Țara de origine	Producătorul	Specificarea tehnică deplină solicitată de către autoritatea contractantă	Specificarea tehnică deplină propusă de către ofertant	Standarde de referință
1	2	3	4	5	6	7	8
	Bunuri						
	Lotul 1						
	Camera video IP exterioară 4Mp	IPC2124LE-ADF28KM-G	China	Uniview	Camera de tipul Camera IP Uniview IPC2124LE-ADF28KM-G, 4MP Tehnologie IP Rezoluție imagine 4 Mpx Iluminare IR, până la 50 m Compresie video Ultra 265, H.265 Slot card MicroSD/SD Built-in Mic PoE Tensiunea de alimentare 12 V Consum max. 6 W Temperatura de operare -30+60 °C	• High quality image with 4MP, 1/3"CMOS sensor • 4MP (2688*1520)@ 25/20fps; 4MP (2560*1440)@ 25/20fps; 3MP (2304*1296) @30/25fps; 2MP (1920*1080) @30/25fps; • Ultra 265, H.265, H.264, MJPEG • Easystar technology ensures high image quality in low illumination environment • 120dB true WDR technology enables clear image in strong light scene • Support 9:16 Corridor Mode	https://www.uniview.com/Products/Cameras/Easy/IPC2124LE-ADF28(40)KM-G/

					Dimensiuni 190x73x71 mm Carcasa camerei realizată din metal Ingression protection: IP67 Garanție min. 2 ani	• Built-in Mic • Smart IR, up to 50m (164ft) IR distance • Supports 256 G Micro SD card • IP67 protection • Support PoE power supply • 3-Axis The camera body is made of metal, providing reliable protection and resistance to external influences. Garantie 3 ani	
	Registrator Video IP 64 canale	NVR508-B	China	Uniview	Registrator NVR- 64 canale de tipul NVR508-64B Support Ultra 265/H.265 video formats VGA and HDMI independent output 8 SATA HDD, up to 12TB for each HDD Support N+1 Hot spare ANR technology to enhance the storage reliability when the network is disconnected Support cloud upgrade HDMI: 4K (3840x2160)@30, 1920x1080p@60, 1920x1080p@50, 1600x1200@60, 1280x1024@60, 1280x720@60, 1024x768@60 VGA: 1920x1080p@60,	Registrator NVR- 64 canale de tipul NVR508-64B Support Ultra 265/H.265 video formats VGA and HDMI independent output 8 SATA HDD, up to 12TB for each HDD Support N+1 Hot spare ANR technology to enhance the storage reliability when the network is disconnected Support cloud upgrade HDMI: 4K (3840x2160)@30, 1920x1080p@60, 1920x1080p@50, 1600x1200@60, 1280x1024@60, 1280x720@60, 1024x768@60 VGA: 1920x1080p@60,	https://sgcdn.uniview.com/Products/NVR/Prime/NVR508-B/

					1920x1080p@50, 1280x1024@60, 1600x1200@60, 1280x720@60, 1024x768@60 2 RJ-45 10M/100M/1000M self-adaptive Ethernet Interface Front: 2 x USB2.0, Rear panel: 1 x USB3.0 Power Supply 100~240V AC Power Consumption: ≤ 32W (without HDD) Working Environment -10°C~+ 55°C (+14°F~+131°F), Humidity ≤ 90% RH (noncondensing) Incoming bandwidth 320Mbps Outgoing bandwidth 160Mbps Garanția min 2 ani	1920x1080p@50, 1280x1024@60, 1600x1200@60, 1280x720@60, 1024x768@60 2 RJ-45 10M/100M/1000M self-adaptive Ethernet Interface Front: 2 x USB2.0, Rear panel: 1 x USB3.0 Power Supply 100~240V AC Power Consumption: ≤ 32W (without HDD) FTP/Schedule/EventSnapshot 4-ch snapshot, up to D1 resolution Working Environment -10°C~+ 55°C (+14°F~+131°F), Humidity ≤ 90% RH (noncondensing) Incoming bandwidth 320Mbps Outgoing bandwidth 160Mbps Garanția 3 ani	
	Registrator video IP de 32 canale	NVR304-E2	China	Uniview	Registrator de 32 canale pentru rezerva cu montare in RACK 32-channel input 4 SATA HDDs, Up to 8TB for each HDD Support Ultra H.265/H.265/H.264 video format VGA: 1920x1080p/60Hz, 1920x1080p/50Hz, 1600x1200/60Hz,1280x1024/60 Hz, 1280x720/60Hz, 1024x768/60Hz HDMI: 4K	Support Ultra H.265/H.265/H.264 video formats 16/32-channel input Supports mainstream cameras of ONVIF conformance(Profile S, Profile G, Profile T) and RTSP protocols Support 1-ch HDMI, 1-ch VGA. HDMI up to 4K (3840x2160) resolution HDMI and VGA independent outputs provided	https://www.uniview.com/Products/NVR/Easy/NVR304-E2/

					(3840x2160)/30Hz, 1920x1080p/60Hz, 1920x1080p/50Hz, 1280x1024/60Hz, 1280x720/60Hz, 1024x768/60Hz Power Supply 12V DC/5A Power Consumption: ≤ 12 W (without HDD) Working Environment - 10°C~+ 55°C (+14°F~+131°F), Humidity ≤ 90% RH (noncondensing)	Up to 12 Megapixels resolution recording 4 SATA HDDs, Up to 8TB for each HDD Support RAID 1, 5 Various fisheye dewarping odes for live view and playback for both web interface and GUI ANR technology to enhance the storage reliability when the network is disconnected Support cloud upgrade	
	Router central in centrul de monitorizare	CCR2004- 16G-2S+	Letonia	Mikrotik	Router central de tipul CCR2004-16G-2S+ Cu instalare in centrul de monitorizare 10/100/1000 Ethernet ports 16Ethernet SFP+ ports 2 Operating System RouterOS v7 Size of RAM 4 GB Storage size 128 MB Storage type NAND MTBF Approximately 200'000 hours at 25C Tested ambient temperature - 20°C to 60°C CPU temperature monitor Yes PCB temperature monitor Yes Voltage Monitor Yes AC input range 100-240 Frequency (Hz) 50-60 Max power consumption 48 W Max power consumption	CCR2004-16G-2S+ Architecture ARM 64bit CPU AL32400 CPU core count 4 CPU nominal frequency 1700 MHz Switch chip model 88E6191X Dimensions 443 x 210 x 44 mm RouterOS license 6 Operating System RouterOS v7 Size of RAM 4 GB Storage size 128 MB Storage type NAND MTBF Approximately 200'000 hours at 25C Tested ambient temperature - 20°C to 60°C IPsec hardware acceleration Yes Number of AC inputs 2 AC input range 100-240 Frequency (Hz) 47-63 Max power consumption 48 W	https://mikrotik.com/product/ccr2004_16g_2splus#fndtn-specifications

					without attachments 35 W	Max power consumption without attachments 35 W	
	Comutator de agregare in centrul de monitorizare.	CRS326-24G-2S+RM	Letonia	Mikrotik	Comutator central de agregare de tipul MikroTik CRS326-24G-2S+RM cu instalare in centrul de monitorizare 10/100/1000 Ethernet ports 24 SFP+ ports 2 Serial console port RJ45 Operating System RouterOS / SwitchOS Size of RAM 512 MB Storage size 16 MB Storage type FLASH Number of DC inputs 2 (PoE-IN, DC jack) DC jack input Voltage 10-30 V Max power consumption 24 W Cooling type Passive PoE in Passive PoE PoE in input Voltage 10-30 V	Architecture ARM 32bit CPU 98DX3236 CPU core count 1 CPU nominal frequency 800 MHz Switch chip model 98DX3236 Dimensions 443 x 144 x 44 mm RouterOS license 5 Operating System RouterOS / SwitchOS Size of RAM 512 MB Storage size 16 MB Storage type FLASH MTBF Approximately 200'000 hours at 25C Tested ambient temperature - 40°C to 60°C Number of DC inputs 2 (DC jack, PoE-IN) DC jack input Voltage 10-30 V Max power consumption 24 W Cooling type Passive PoE in Passive PoE PoE in input Voltage 10-30 V	https://mikrotik.com/product/CRS326-24G-2SplusRM#fndtn-specifications
	Comutator de rețea	Mikrotik CRS106-1C-5S	Letonia	Mikrotik	Comutator de rețea de tip Mikrotik CRS106- 1C-5S Number of DC inputs 2 (PoE-IN, DC jack) DC jack input Voltage 11-30 V Max power consumption 11 W Cooling type Passive PoE in Passive PoE PoE	Product code CRS106-1C-5S Architecture MIPSBE CPU QCA8511 CPU core count 1 CPU nominal frequency 400 MHz Switch chip model QCA8511	https://mikrotik.com/product/CRS106-1C-5S#fndtn-specifications

					in input Voltage 11-30 V Tested ambient temperature -20°C to 70°C	Dimensions 114 x 137 x 29mm RouterOS license 5 Operating System RouterOS Size of RAM 128 MB Storage size 16 MB Storage type FLASH MTBF Approximately 100'000 hours at 25C Tested ambient temperature - 20°C to 70°C Number of DC inputs 2 (DC jack, PoE-IN) DC jack input Voltage 11-30 V Max power consumption 11 W Cooling type Passive PoE in Passive PoE	
	Router	hEX lite	Letonia	Mikrotik	Router de retea de tip hEX lite Number of DC inputs 2 (DC jack, PoE-IN) DC jack input Voltage 6-30 V Max power consumption 2 W Cooling type Passive PoE in Passive PoE PoE in input Voltage 6-30 V Tested ambient temperature - 40°C to 70°C	Architecture MIPSBE CPU QCA9533 CPU core count 1 CPU nominal frequency 850 MHz Switch chip model QCA9533 Dimensions 113x89x28mm. Weight without packaging and cables: 129g RouterOS license 4 Operating System RouterOS Size of RAM 64 MB Storage size 16 MB Storage type FLASH MTBF Approximately 100'000 hours at 25C Tested ambient temperature - 40°C to 70°C	https://mikrotik.com/product/RB750r2#fndtn-specifications

						Number of DC inputs 2 (DC jack, PoE-IN) DC jack input Voltage 6-30 V Max power consumption 2 W Cooling type Passive PoE in Passive PoE	
	Comutator de rețea switch 8xPOE port	POE ZKTeco PE082-120-C	global manufacturer	ZKTeco	Comutator de tip POE ZKTeco PE082-120-C, 8xPOE, 2xLAN Uplink, max. 120W pentru instalare la obiecte 8 PoE Ports (10 / 100 Mbps) 2 Uplink Ports (10 / 100 Mbps) All ports support MDI / MDIX self-adaptation IEEE 802.3af, IEEE802.3at Max 30W per Port, total PoE budget 120W Switching Bandwidth 2Gbps Packet Forwarding Rate 1.488Mpps Buffer Memory 768KB Mac Table Size 2KB MTBF 100,000 hours Power Input AC220V, 50 / 60Hz Lightning Protection 2KV	Ethernet Port 8 PoE Ports (10 / 100 Mbps) 2 Uplink Ports (10 / 100 Mbps) All ports support MDI / MDIX self-adaptation IEEE 802.3af, IEEE802.3at Max 30W per Port, total PoE budget 120W Switching Bandwidth 2Gbps Packet Forwarding Rate 1.488Mpps Buffer Memory 768KB Mac Table Size 2KB MTBF 100,000 hours Power Input AC220V, 50 / 60Hz Lightning Protection 2KV Net Weight 1.3kg	https://www.zkteco.com/en/POESwitch/PE08-120
	Comutator de rețea Switch 4xPOE port	ZKTeco PE04-60	global manufacturer	ZKTeco	Comutator de tip Switch POE ZKTeco PE04-60 pentru instalare la obiecte 4 PoE Ports (10 / 100 Mbps) 2 Uplink Ports (10 / 100 Mbps) All ports support MDI / MDIX self-adaptation	4 PoE Ports (10 / 100 Mbps) 2 Uplink Ports (10 / 100 Mbps) All ports support MDI / MDIX self-adaptation POE Standard IEEE 802.3af, IEEE802.3at PoE Consumption	https://www.zkteco.com/en/POESwitch/PE04-60

					POE Standard IEEE 802.3af, IEEE802.3at PoE Consumption Max 30W per Port, total PoE budget 60W Power Input AC 220V, 50 / 60Hz Lightning Protection 2KV Working Temperature -20°C ~ 50°C (-4°F ~ 122°F) Working Humidity 10% ~ 90%, non-condensing	Max 30W per Port, total PoE budget 60W Power Input AC 220V, 50 / 60Hz Lightning Protection 2KV Working Temperature -20°C ~ 50°C (-4°F ~ 122°F) Working Humidity 10% ~ 90%, non-condensing Net Weight 1kg	
	Hard Disc 4TB	WD43PURZ	Western Digital	SUA	Hard disk realizat pentru 24/7, sisteme de securitate de înaltă definiție. Capacitate- 4 TB Viteza de rotație 5400 Rpm Form Factor 3.5-Inch Connector SATA Transfer Rate up to 175MB/s Cache Size 256MB Cicluri de încărcare / descărcare 300,000 Temperatura de funcționare 0 la 65 grade C Garanție min. 2 ani	Capacity 4TB Form Factor 3.5-Inch Connector SATA Compatibility Up to 64 HD cameras Up to 16 drive bays AllFrame firmware technology Interface SATA Transfer Rate up to 175MB/s Disk Speed (RPM) Recording Technology CMR Cache Size 256MB Warranty 3-Year Limited Warranty Dimensions (L x W x H) 5.79" x 4" x 1.03" Weight 570gms Operating Temperature 0°C to 65°C Non-Operating Temperature -40°C to 70°C	https://www.westerndigital.com/products/internal-drives/wd-purple-sata-hdd?sku=WD43PURZ

Computer for Operator	Intel	Intel	SUA	• Processor: x64 bit, 3GHz, min 20 cores, Total Threads 28 • RAM: 32GB DDR5 • SSD: 1TB NVMe PCIe 4.0 • HDD 4TB Sata (III) • Video card: memory – min 4 GB DDR5, 2 DP or HDMI output ports, simultaneous displays – min 2 with FullHD resolution • Network interface – 1 x 1 Gbps RJ-45 • Wireless keyboard/mouse – Eng/Ro/Ru layout • Operating system: MS Windows 11 Pro 64-bit	• Processor: x64 bit, 3GHz, min 20 cores, Total Threads 28 • RAM: 32GB DDR5 • SSD: 1TB NVMe PCIe 4.0 • HDD 4TB Sata (III) • Video card: memory – min 4 GB DDR5, 2 DP or HDMI output ports, simultaneous displays – min 2 with FullHD resolution • Network interface – 1 x 1 Gbps RJ-45 • Wireless keyboard/mouse – Eng/Ro/Ru layout • Operating system: MS Windows 11 Pro 64-bit	
Monitor for Operator PC	LS32A600U	Samsung	Coreea de Sud	Diagonala ecranului: 31,5 " Rezoluția Display-ului: 1920x1080 FHD Tip panou: VA Rata maximă de reîmprospătare: 75 Hz Timp de răspuns: 4 ms Intrări HDMI: 1x HDMI 1.4 DisplayPort: 1x DP 1.2 Unghi de vizualizare 178° / 178° Luminozitate (tipica) 250 cd/m2	Diagonala ecranului: 32" 2K Aspect imagine 16:9 Numărul de culori 1.07 Bilion Contrast static 3000:1 Timpul de răspuns 5 ms Tipul rezoluției ecranului 2K Refresh rate 75 Hz Dimensiune ecran 32 Tip display VA Rezoluție ecran 2560 x 1440	

	Sursa de alimentare de rezervă	UPS Daker DK/Plus + 3000 VA/2700W	Legrand	China	3000kVA/2400W, Rackmount 2U, 230V, 6x IEC C13 + 1x IEC C19 outlets, Intelligent Card Slot, LCD, W/ rail kit High quality, Double-conversion On-line UPS designed for essential power protection needs even in the most unstable power conditions. Output power capacity 2.4kWatts / 3.0kVA Rack Height 2U	Putere nominala: 3000 VA Putere activa: 2700 W Tehnologie:On-Line Double Convers. Forma de unda: sinusoidala Arhitectura: Tower, rack mount de 19' Specificatii intrare: Tensiune de intrare: 230 V Frecventa: 50-60 Hz ±5% autosensing Gama tensiune de intrare: 160 - 288 V, THD curent de intrare: < 3% Factor de putere: > 99% Specificatii iesire: Tensiune de iesire: 230V ± 1% Frecventa tens. de iesire: 50/60 Hz ±1% (poate fi setata din panoul LCD) Crest factor: 1/3 Bypass: bypass automat intern (inclus), bypass extern pentru intretinere (optional)	
	Dulap de telecomunica tii 42U 800x1000	Dulap pe podea 42U, 600*1000	Lanitron	China	(Server rack) Dulap pe podea 42U, 600*1000*1900,19" usile perforate cu vent. si termostat	Dulap pe podea 42U, 600*1000*1967, 19" negru, dezasamblat (usile perforate, în set intră picioare, roți, sistem ventilare)	
	Box 600x800 exterior	Lada de metal 600*800	IEK	China	Ladă de metal 800 x 600 x 250 mm Cu sistem de ventilare și termostat	Ladă de metal 800 x 600 x 250 mm Cu sistem de ventilare și termostat	
	Echipament pentru instalare in RACK	Polita 19" 700mm	Lanitron	China	Polita 19" fixata perforata p/u dulap 1U, pînă la 50kg	Polita 19" 700mm fixata perforata p/u dulap pe podea cu adincimea 1000 mm, 1U, negru, pina la 50 kg	
	Echipament pentru instalare in RACK	FO Patch Panel LC/UPC	Lanitron	China	19" patch panelă, 1.25U, tip LC/UPC 24 porturi full-loaded, cu caseta, bucle de protectie, adaptoare si pig-tailuri	19" patch panelă, 1.25U, tip LC/UPC 24 porturi full-loaded, cu caseta, bucle de protectie, adaptoare si pig-tailuri	

	Echipament pentru instalare in RACK	Bloc de prize electrice 8 pozitii 19"	Lanitron	China	19" 1U bloc de prize electrice (8 poziții), negru, 1U, UPS plug, lungimea cablului - 2 m., 16A, 3x1,5 mm2	19" 1U bloc de prize electrice (8 poziții), negru, 1U, UPS plug, lungimea cablului - 2 m., 16A, 3x1,5 mm2	
	Echipament pentru instalare in RACK	Organizator de cablu 1U (negru)	Lanitron	China	BG 19" organizator pentru cablu 1U, din metal	19" organizator pentru cablu 1U, din metal, adâncimea 65mm, negru	
	Cablu Exterior	Cablu UTP Extern 5E	Lanitron	China	Cable LSS UTP outdoor cat. 5e /0,50 mm cooper+4 pairs+PE black+messenge	Cable LSS UTP outdoor cat. 5e /0,50 mm cooper+4 pairs+PE black+messenge	
	Cablu Interior	Cablu UTP 4x2x0.5 CAT. 5E	Lanitron	China	Cable LSS UTP cat. 5e /0,50 mm cooper+4 pairs+PVC	Cable LSS UTP cat. 5e /0,50 mm cooper+4 pairs+PVC	
	Cablu Electric	Cablu electric VVGng-LS 3*2,5	Volta	Ucraina	VVGhg-LS Secțiune 2.5 mm ² Numărul de fire 3 *	VVGhg-LS Secțiune 2.5 mm ² Numărul de fire 3 *	
	Box Metalic	Lada metal 400*500	Iek	China	Box metalic de utilizare externa cu dimensiunile 400mmx500mmx220mm	Lada metal EXTERN 400*500	
	Patch Cord	SM 9/125, Duplex, patch-cord, LC-LC type	Lanitron	China	Patch Cord Optic LC	SM 9/125, Duplex, patch-cord, LC-LC type	
		SFP modules, 3km, LC	Lanitron	China	SFP Module 3km LC-	WDM SFP 1550T/1310R modules, 1.25G, 3km, LC connector	
	Priza	Priza exterioara 3 locuri cu pamintare	Makel	Turcia	Priza electrica 220v 16A 3 socket	Priza 220v, 16A, 3 locuri, Makel	

		Makel					
	Cnal Cablu	Cablu canal 40*25 mm	Ruvinil	China	Cablu Canal 40x25mm	Cablu Canal 40x25mm	
	Priza rețea	Priza de date 2xRJ45	Makel	Turcia	Priza de rețea RJ-45 dubla	Priza de rețea RJ-45 dubla	
	Automat electric	Intrerupator automat 1P 16A	IEK	China	Automat electric 16A	Întreprupator automat IEK BA47 29 1P 16 A 220 - 240 V B	
	Cablu HDMI	Cablu HDMI 5M	Cablexpert	China	Cablu HDMI 5m	Cablu Video Cablexpert CC-HDMI4-5M, HDMI (M) - HDMI (M), 5m, Negru	
	Materiale de montare				Materiale de montare după necesitate (cablu de alimentare, box, materiale auxiliare de montaj, consumabile, etc.)		
	Conectori și accesorii				Conectori RJ-45, Module RJ-45, accesorii de montaj după caz		
	Servicii				Servicii de internet pentru toate obiectele selectate inclusiv și centrul de monitorizare local pentru toată perioada contractului.		
	Servicii				Servicii de Mentenanta pentru intregul sistem reconfigurat pentru perioada 01.06.2024- 31.12.2024 Cu următoarele condiții și frecvențe: 1. Verificarea aspectului și starea elementelor de fixare a		

					camerilor video; verificarea trimestrială a semnalului și înregistrare a acestuia. Dacă e necesar, se efectuează lucrări de fixare sau înlocuire a echipamentului defect. 2. Verificarea funcționalității de înregistrare; lunar: verificarea stării și înregistrarea de pe hard disk. Verificarea ventilatorului de răcire a registratorului. 3. Asigurarea în decurs de 24 ore lucrătoare de la solicitarea beneficiarului a verificării defecțiunii sistemului și oferirea raportului către beneficiar pe întreaga perioadă a contractului, inclusiv înlocuirea echipamentului defect aflat în perioada de garanție cât și prestarea lucrărilor de înlocuire, reparație și reconfigurare a sistemelor deservite din contul prestatorului.		
	Lucrari				Lucrari de Instalare, configurare și punere in funcțiune. Sisitemul de supraveghere video trebuie sa fie cablat si montat cu cunoasterea topologiei rețelei existente,și solicitărilor actuale a beneficiarului - lucrările de cablaj strict		

					marcat pe partea de intrare in patch-panel, lucrările de montare exterior cu folosire după caz, cablu canal sau teava gofrata, cablu cupru de tip exterior după caz cu suport de oțel. Lucrările se vor finisa după configurarea intregului sistem.		
	Total lot 1						
	Lotul 2						
	TOTAL						

Semnat:_____ Numele, Prenumele: Igor Țurcanu În calitate de: _administrator_
Ofertantul: _SC Business Security SRL Adresa: mun.Chisinau str. Ginta Latină 3-21_