

Specificații tehnice (F4.1)

[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 ocds-b3wdp1-MD-1571401936005 din 28 octombrie 2019																																					
Denumirea procedurii de achiziție: Echipament de rețea																																					
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	Standard de referință																														
1	2	3	4	5	6	7	8																														
Bunuri																																					
32420000-3	Lotul 1																																				
	Switch Manageabil, Layer3 48 porturi	C9200L-48T-4G-E	SUA	CISCO	<p>Switch fundamentals:</p> <ul style="list-style-type: none"> - Layer 2 (VLAN distribution protocol fully compatible with VTP, DTP, MSTP, PVRST+, Port Security, DHCP snooping), Routed Access (RIP, EIGRP Stub, OSPF - 1000 routes), PBR, PIM Stub Multicast (1000 routes), PVLAN, VRRP, PBR, CDP-compatible protocol for discovering neighbor devices at layer 2 of TCP OSI (ex: LLDP), QoS, FHS, 802.1X, MACsec-128, CoPP, IP SLA Responder, DHCP server - Cross-stack EtherChannel - the ability to configure EtherChannel technology across different members of the stack for high resiliency. - SSH, SNMP (v2 and v3), web UI <p>Telemetry and visibility: Model driven telemetry, sampled IPFIX, SPAN, RSPAN</p> <p>Automation: NETCONF, RESTCONF, YANG, PnP Agent,</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">C9200L-48T-4G-E</td> <td style="text-align: center;">Catalyst 9200L 48-port data, 4 x 1G, Network Essentials</td> <td style="text-align: center;">1</td> </tr> <tr> <td colspan="3">included :</td> </tr> <tr> <td style="text-align: center;">C9200L-NW-E-48</td> <td style="text-align: center;">C9200L Network Essentials, 48-port license</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">CAB-TA-EU</td> <td style="text-align: center;">Europe AC Type A Power Cable</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">PWR-C5-BLANK</td> <td style="text-align: center;">Config 5 Power Supply Blank</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">C9200-STACK-BLANK</td> <td style="text-align: center;">Catalyst 9200 Blank Stack Module</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">C9200L-DNA-E-48</td> <td style="text-align: center;">C9200L Cisco DNA Essentials, 48-port Term license</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">C9200L-DNA-E-48-3Y</td> <td style="text-align: center;">C9200L Cisco DNA Essentials, 48-port, 3 Year Term license</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">NETWORK-PNP-LIC</td> <td style="text-align: center;">Network Plug-n-Play License for zero-touch device deployment</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">CON-SNT-C920L48E</td> <td style="text-align: center;">SNTC-8X5XNBD Catalyst 9200L 48-port data, 4 x 1G, Net</td> <td style="text-align: center;">1</td> </tr> </table>	C9200L-48T-4G-E	Catalyst 9200L 48-port data, 4 x 1G, Network Essentials	1	included :			C9200L-NW-E-48	C9200L Network Essentials, 48-port license	1	CAB-TA-EU	Europe AC Type A Power Cable	1	PWR-C5-BLANK	Config 5 Power Supply Blank	1	C9200-STACK-BLANK	Catalyst 9200 Blank Stack Module	2	C9200L-DNA-E-48	C9200L Cisco DNA Essentials, 48-port Term license	1	C9200L-DNA-E-48-3Y	C9200L Cisco DNA Essentials, 48-port, 3 Year Term license	1	NETWORK-PNP-LIC	Network Plug-n-Play License for zero-touch device deployment	1	CON-SNT-C920L48E	SNTC-8X5XNBD Catalyst 9200L 48-port data, 4 x 1G, Net	1	ISO, CE
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				<p>PnP</p> <p>RFID tags: the switch needs to have an embedded RFID tag that facilitates easy asset and inventory management using commercial RFID readers</p> <p>Bluetooth ready: The switch needs to have hardware support to connect a Bluetooth dongle, enabling the technician to use this wireless interface as an IP management port interface. The port can be used for configuration and troubleshooting using WebUI or the Command-Line Interface (CLI), and to transfer images and configurations</p> <p>Performance specifications:</p> <ul style="list-style-type: none">- Stacking bandwidth – 80Gbps- Total number of MAC addresses – 16000- Total number of IPv4 routes (ARP plus learned routes) - 11,000 (8,000 direct routes and 3,000 indirect routes)- IPv4 routing entries – 3000- IPv6 routing entries – 1500- Multicast routing scale – 1000- QoS scale entries – 1000- ACL scale entries – 1500- Packet buffer per SKU – 6MB- Flexible IPFIX (FNF) entries - 16000 flows- DRAM – 2GB- Flash – 4GB- VLAN IDs – 1024- Total Switched Virtual	
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			<p>Interfaces (SVIs) – 512</p> <ul style="list-style-type: none">- Jumbo frames – 9198 bytes- Number of IPv4 bindings – 10000- Switching capacity – 104Gbps (64 bytes packets)- Switch capacity with stacking – 184Gbps (64 bytes packets)- Forwarding rate – 77.38 Mpps (64 bytes packets) <p>Connectors and cabling:</p> <ul style="list-style-type: none">- 48 x 1000BASE-T ports: RJ-45 connectors, 4-pair Cat 5E UTP cabling 4 x SFP ports- Slot for stack module- Ethernet management port: RJ-45 connectors, 4-pair Cat 5 UTP cabling- Management console port: RJ-45-to-DB9 cable for PC connections, USB-C adaptor, USB adaptor- Power port for 220VAC <p>Supported standards:</p> <ul style="list-style-type: none">- IEEE 802.1s- IEEE 802.1w- IEEE 802.1x- IEEE 802.1x-Rev- IEEE 802.3ad- IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports- IEEE 802.1D Spanning Tree Protocol- IEEE 802.1p CoS prioritization- IEEE 802.1Q VLAN- IEEE 802.3 10BASE-T specification- IEEE 802.3u 100BASE-TX specification- IEEE 802.3ab 1000BASE-T specification	
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- IEEE 802.3z 1000BASE-X specification
- RMON I and II standards

Normal operating temperature and altitudes:
-5°C to +45°C, up to 5000 feet (1500m)
-5°C to +40°C, up to 10,000 feet (3000m)
Minimum ambient temperature for cold start is 32°F (0°C)

Short-term* exceptional conditions:
-5°C to +50°C, up to 5000 feet (1500m)
-5°C to +45°C, up to 10,000 feet (3000m)
-5°C to +45°C, at sea level with single fan failure

Relative humidity operating and nonoperating noncondensing: 5% to 90% noncondensing

Altitude: up to 3000 meters, up to 45°C

EMI and EMC compliance:
- FCC Part 15 (CFR 47) Class A
- ICES-003 Class A
- EN 55032 Class A
- CISPR 32 Class A
- AS/NZS 3548 Class A
- BSMI Class A
- VCCI Class A
- CISPR 35
- EN 55024, EN300 386*, EN 61000-3-2, EN 61000-3-3
- EN 61000-6-1

Safety compliance: UL 60950-1, CAN/CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1, CCC, CE Marking

				<p>LED indicators:</p> <ul style="list-style-type: none"> - "AC OK": Input power to the power supply is OK - "PS OK": Output power from the power supply is OK <p>Mean time between failures: 347760 hours</p> <p>Dimensions (cm): 4.4 x 44.5 x 32.9</p> <p>Additional features which can be enabled by additional license: EIGRP, HSRP, IS-IS, BSR, MSDP, IP SLA, OSPF (no routes limits);4 VRF, VXLAN, LISP, full - not sampled IPFIX, EEM</p> <p>Warranty – one year</p> <ul style="list-style-type: none"> - Not refurbished <p>(Certificat/document care ar confirma că echipamentul nu este refurbished)</p> <ul style="list-style-type: none"> - În ofertă obligatoriu trebuie să fie indicat modelul comutatorului și tipul licenței 																																
Switch Manageabil, Layer3 24 porturi PoE	C9200L-24P-4G-E	SUA	CISCO	<p>Switch fundamentals:</p> <ul style="list-style-type: none"> - Layer 2 (VLAN distribution protocol fully compatible with VTP, DTP, MSTP, PVRST+, Port Security, DHCP snooping), Routed Access (RIP, EIGRP Stub, OSPF - 1000 routes), PBR, PIM Stub Multicast (1000 routes), PVLAN, VRRP, PBR, CDP-compatible protocol for discovering neighbor devices at layer 2 of TCP OSI (ex: LLDP), QoS, FHS, 802.1X, MACsec-128, CoPP, IP SLA Responder, DHCP server - Cross-stack EtherChannel - the ability to configure EtherChannel technology across different members of the stack for high resiliency. 	<table border="1"> <tr> <td>C9200L-24P-4G-E</td> <td>Catalyst 9200L 24-port PoE+, 4 x 1G, Network Essentials</td> <td>1</td> </tr> <tr> <td>included :</td> <td></td> <td></td> </tr> <tr> <td>C9200L-NW-E-24</td> <td>C9200L Network Essentials, 24-port license</td> <td>1</td> </tr> <tr> <td>CAB-TA-EU</td> <td>Europe AC Type A Power Cable</td> <td>1</td> </tr> <tr> <td>PWR-C5-BLANK</td> <td>Config 5 Power Supply Blank</td> <td>1</td> </tr> <tr> <td>C9200-STACK-BLANK</td> <td>Catalyst 9200 Blank Stack Module</td> <td>2</td> </tr> <tr> <td>C9200L-DNA-E-24</td> <td>C9200L Cisco DNA Essentials, 24-port Term license</td> <td>1</td> </tr> <tr> <td>C9200L-DNA-E-24-3Y</td> <td>C9200L Cisco DNA Essentials, 24-port, 3 Year Term license</td> <td>1</td> </tr> <tr> <td>NETWORK-PNP-LIC</td> <td>Network Plug-n-Play License for zero-touch device deployment</td> <td>1</td> </tr> <tr> <td>CON-SNT-C920L24G</td> <td>SNTC-8X5XNBD Catalyst 9200L 24-port PoE+, 4 x 1G, Net</td> <td>1</td> </tr> </table>	C9200L-24P-4G-E	Catalyst 9200L 24-port PoE+, 4 x 1G, Network Essentials	1	included :			C9200L-NW-E-24	C9200L Network Essentials, 24-port license	1	CAB-TA-EU	Europe AC Type A Power Cable	1	PWR-C5-BLANK	Config 5 Power Supply Blank	1	C9200-STACK-BLANK	Catalyst 9200 Blank Stack Module	2	C9200L-DNA-E-24	C9200L Cisco DNA Essentials, 24-port Term license	1	C9200L-DNA-E-24-3Y	C9200L Cisco DNA Essentials, 24-port, 3 Year Term license	1	NETWORK-PNP-LIC	Network Plug-n-Play License for zero-touch device deployment	1	CON-SNT-C920L24G	SNTC-8X5XNBD Catalyst 9200L 24-port PoE+, 4 x 1G, Net	1	ISO, CE
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			<ul style="list-style-type: none"> - Per-port PoE power sensing measures actual power being drawn, enabling more intelligent control of powered devices.5 - The PoE MIB provides proactive visibility into power usage and allows you to set different power-level thresholds. Performance specifications: - Stacking bandwidth – 80Gbps - Total number of MAC addresses – 16000 - Total number of IPv4 routes (ARP plus learned routes) - 11,000 (8,000 direct routes and 3,000 indirect routes) - IPv4 routing entries – 3000 - IPv6 routing entries – 1500 - Multicast routing scale – 1000 - QoS scale entries – 1000 - ACL scale entries – 1500 - Packet buffer per SKU – 6MB - IPFIX (FNF) entries - 16000 flows - DRAM – 2GB - Flash – 4GB - VLAN IDs – 1024 - Total Switched Virtual Interfaces (SVIs) – 512 - Jumbo frames – 9198 bytes - Number of IPv4 bindings – 10000 - Switching capacity – 104Gbps (64 bytes paclets) - Switch capacity with stacking – 184Gbps (64 bytes paclets) - Forwarding rate – 77.38 Mpps (64 bytes paclets) Connectors and cabling: - 24 x 1000BASE-T ports: RJ-45 connectors, 4-pair Cat 5E UTP cabling IEEE 802.3at and IEEE 	
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			<p>802.3af</p> <ul style="list-style-type: none">- 4 x SFP ports- Slot for stack module- Ethernet management port: RJ-45 connectors, 4-pair Cat 5 UTP cabling- Management console port: RJ-45-to-DB9 cable for PC connections, USB-C adaptor, USB adaptor- Power port for 220VAC <p>Supported standards:</p> <ul style="list-style-type: none">- IEEE 802.1s- IEEE 802.1w- IEEE 802.1x- IEEE 802.1x-Rev- IEEE 802.3ad- IEEE 802.3af- IEEE 802.3at- IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports- IEEE 802.1D Spanning Tree Protocol- IEEE 802.1p CoS prioritization- IEEE 802.1Q VLAN- IEEE 802.3 10BASE-T specification- IEEE 802.3u 100BASE-TX specification- IEEE 802.3ab 1000BASE-T specification- IEEE 802.3z 1000BASE-X specification <p>- RMON I and II standards</p> <p>Normal operating temperature and altitudes:</p> <p>-5°C to +45°C, up to 5000 feet (1500m)</p> <p>-5°C to +40°C, up to 10,000 feet (3000m)</p>		
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EMI and EMC compliance:
- FCC Part 15 (CFR 47) Class A
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- CISPR 32 Class A
- AS/NZS 3548 Class A
- BSMI Class A
- VCCI Class A
- CISPR 35
- EN 55024, EN300 386*, EN 61000-3-2, EN 61000-3-3
- EN 61000-6-1
Safety compliance: UL 60950-1, CAN/CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1, CCC, CE Marking
LED indicators:
- "AC OK": Input power to the power supply is OK
- "PS OK": Output power from the power supply is OK
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347760 hours
Dimensions (cm): 4.4 x 44.5 x 32.9
Additional features which can be enabled by additional license:
EIGRP, HSRP, IS-IS, BSR, MSDP,

				IP SLA, OSPF (no routes limits); VRF, VXLAN, LISP, Full - not sampled IPFIX, EEM Warranty – one year - Not refurbished (Certificat/document care ar confirma că echipamentul nu este refurbished) - În ofertă obligatoriu trebuie să fie indicat modelul comutatorului și tipul licenței.		
LOTUL 2						
1000BaseLX SFP10/100/1000BaseTX SFP	1000BaseLX SFP10/100/1000BaseTX SFP	China	SFP	- Form factor: SFP - Distance: Up to 10km - Wavelength: 1310 - Speed: 1Gbps - Connector: LC - Fiber type: Single mode - Compatibility: Cisco - Hotswappable - Not refurbished (Certificat/document care ar confirma că echipamentul nu este refurbished)	- Form factor: SFP - Distance: Up to 10km - Wavelength: 1310 - Speed: 1Gbps - Connector: LC - Fiber type: Single mode - Compatibility: Cisco - Hotswappable - Not refurbished	STAS
10/100/1000BaseTX SFP	10/100/1000BaseTX SFP	China	SFP	Form factor: SFP - Speed: 10/100/1000Mbps - Connector: RJ45 - Compatibility: Cisco - Hotswappable - Not refurbished (Certificat/document care ar confirma că echipamentul nu este refurbished)	Form factor: SFP - Speed: 10/100/1000Mbps - Connector: RJ45 - Compatibility: Cisco - Hotswappable - Not refurbished	STAS

Semnat: _____ Numele, Prenumele: Constantin Alexandru În calitate de: director
Ofertantul: Triomac SRL Adresa: Orhei, str Stefan cel Mare 3, ap 16

Specificații de preț (F4.2)

[Acest tabel va fi completat de către ofertant în coloanele 5,6,7,8, iar de către autoritatea contractantă – în coloanele 1,2,3,4,9,10]

Numărul procedurii de achiziție ocds-b3wdp1-MD-1571401936005	din 28 octombrie 2019
Denumirea procedurii de achiziție: Echipament de rețea	

Cod CPV	Denumirea bunurilor/serviciilor	Unitatea de măsură	Cantitatea	Preț unitar (fără TVA)	Preț unitar (cu TVA)	Suma fără TVA	Suma cu TVA	Termenul de Livrare/prestare
1	2	3	4	5	6	7	8	9
	Bunuri							
	Lotul 1							
32420000-3	Switch Manageabil, Layer3 48 porturi	Buc	2	51900.00	62280.00	103800.00	124560.00	În decurs de 30 zile lucrătoare
32420000-3	Switch Manageabil, Layer3 24 porturi PoE	Buc	1	39900.00	47880.00	39900.00	47880.00	În decurs de 30 zile lucrătoare
Total Lotul 1						143700.00	172440.00	
	Lotul 2							
32420000-3	1000BaseLX SFP10/100/1000BaseTX SFP	Buc	4	248.00	297.60	992.00	1190.40	În decurs de 30 zile lucrătoare
32420000-3	10/100/1000BaseTX SFP	Buc	20	350.00	420.00	7000.00	8400.00	În decurs de 30 zile lucrătoare
Total Lotul 2						7992.00	9590.40	
TOTAL						151 692.00	182 030.40	

Semnat: _____ Numele, Prenumele: Constantin Alexandru În calitate de: director
 Ofertantul: Triomac SRL Adresa: Orhei, str Stefan cel Mare 3, ap 16