

SPECIFICAȚII TEHNICE (F4.1)

						Alternativa nr.		
Numărul licitației:		ocds-b3wdp1-MD-1571401936005				Data:		30.10.2019
Denumirea licitației:		Echipament de rețea				Loturile: 1,2		
Cod CPV	Denumirea bunurilor și/sau a serviciilor	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	
Lotul 1								
32420000-3	Switch Manageabil, Layer3 48 porturi	C9200-48T 4G-E	China	Cisco Systems	Switch fundamentals: - 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, MACsec128, 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	- 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, MACsec128, 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		
					Telemetry and visibility:	Model driven telemetry, sampled IPFIX, SPAN, RSPAN	Model driven telemetry, sampled IPFIX, SPAN, RSPAN	
					Automation:	NETCONF, RESTCONF, YANG, PnP Agent, PnP	NETCONF, RESTCONF, YANG, PnP Agent, PnP	
					RFID tags:	the switch needs to have an embedded RFID tag that facilitates easy asset and inventory management using commercial RFID readers	the switch needs to have an embedded RFID tag that facilitates easy asset and inventory management using commercial RFID readers	

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					<p>Bluetooth ready:</p> <p>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>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> <p>- 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 Interfaces (SVIs) - 512 - 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>	<p>- 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 Interfaces (SVIs) - 512 - 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>	

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					Connectors and cabling: - 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: RJ45 connectors, 4-pair Cat 5 UTP cabling - Management console port: RJ45-to-DB9 cable for PC connections, USB-C adaptor, USB adaptor - Power port for 220VAC	- 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: RJ45 connectors, 4-pair Cat 5 UTP cabling - Management console port: RJ45-to-DB9 cable for PC connections, USB-C adaptor, USB adaptor - Power port for 220VAC	
					Supported standards: - 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 - IEEE 802.3z 1000BASE-X specification - RMON I and II standards	- 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 - 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)	-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	-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	5% to 90% noncondensing	
					Altitude: up to 3000 meters, up to 45°C	up to 3000 meters, up to 45°C	

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					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	- 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	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	- "AC OK": Input power to the power supply is OK - "PS OK": Output power from the power supply is OK	
					Mean time between failures:	347760 hours	347760 hours	
					Dimensions (cm):	4.4 x 44.5 x 32.9	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	EIGRP, HSRP, IS-IS, BSR, MSDP, IP SLA, OSPF (no routes limits); VRF, VXLAN, LISP, full - not sampled IPFIX, EEM	
					Warranty:	- one year	- one year	
					Not refurbished	Not refurbished (Certificat/document care ar confirma că echipamentul nu este refurbished) -	NEW	

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32420000-3	Switch Manageabil, Layer3 24 porturi PoE	C9200L- 24P-4G-E	China	Cisco Systems	<p>Switch fundamentals:</p> <p>- 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, MACsec128, 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>	<p>- 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, MACsec128, 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>	
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					<p>Efficient switch operation:</p> <p>The ports have to support reduced power modes so that ports not in use can move into a lower power utilization state. Other efficient switch operation features are as follows: - Per-port power consumption command allows customers to specify a maximum power setting on an individual port. - Per-port PoE power sensing measures actual power being drawn, enabling more intelligent control of powered devices. - The PoE MIB provides proactive visibility into power usage and allows you to set different power-level thresholds.</p>	<p>The ports have to support reduced power modes so that ports not in use can move into a lower power utilization state. Other efficient switch operation features are as follows: - Per-port power consumption command allows customers to specify a maximum power setting on an individual port. - Per-port PoE power sensing measures actual power being drawn, enabling more intelligent control of powered devices. - The PoE MIB provides proactive visibility into power usage and allows you to set different power-level thresholds.</p>	
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					<p>Connectors and cabling:</p> <ul style="list-style-type: none"> - 24 x 1000BASE-T ports: RJ-45 connectors, 4-pair Cat 5E UTP cabling IEEE 802.3at and IEEE 802.3af - 4 x SFP ports - Slot for stack module - Ethernet management port: RJ45 connectors, 4-pair Cat 5 UTP cabling - Management console port: RJ45-to-DB9 cable for PC connections, USB-C adaptor, USB adaptor - Power port for 220VAC 	<ul style="list-style-type: none"> - 24 x 1000BASE-T ports: RJ-45 connectors, 4-pair Cat 5E UTP cabling IEEE 802.3at and IEEE 802.3af - 4 x SFP ports - Slot for stack module - Ethernet management port: RJ45 connectors, 4-pair Cat 5 UTP cabling - Management console port: RJ45-to-DB9 cable for PC connections, USB-C adaptor, USB adaptor - Power port for 220VAC 	
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					Warranty:	- one year	- one year
					Not refurbished	Not refurbished (Certificat/document care ar confirma că echipamentul nu este refurbished) -	NEW
Lotul 2							
32420000-3	1000BASE LX SFP	GLC-LH-SMD	China	Cisco Systems	- 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 - NEW	

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32420000-3	10/100/1000 BaseTX SFP	GLC-T	China	Cisco Systems		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 - NEW	




Semnat: _____ Numele, prenumele: Valeriu Nastasenco În calitate de: Director

Ofertantul: IM Master Systems S.R.L. Adresa: Moldova, Chisinau MD 2021, str. Drumul Viilor 36/2