



***The supply of twenty (20) Engenius ENS620 Ext Wi-Fi 5 Dual-Band Wireless
AC1300 Outdoor Access Points to the CSIR***

Request for Quotation (RFQ) No: 5681/20/04/2021

Date of issue	Tuesday, 06/04/2021
Closing Date and Time	Tuesday, 20/04/2021 at 16:30
RFQ Number	5681/20/04/2021
Contact details	For submission of quotations or any other enquiries: tender@csir.co.za

1 INVITATION FOR QUOTATION

Quotations are hereby invited for the supply of twenty (20) Engenius ENS620 Ext Wi-Fi 5 Dual-Band Wireless AC1300 Outdoor Access Points to the CSIR.

2 QUOTATION REQUIREMENTS

The CSIR requires twenty (20) Engenius ENS620 Ext Wi-Fi 5 Dual-Band Wireless AC1300 Outdoor Access Points

3 TECHNICAL SPECIFICATIONS

Technical Specifications	
Standards	IEEE 802.11b/g/n on 2.4 GHz IEEE802.11a/n/ac on 5 GHz
Antenna	Four (4) External 5 dBi Dual-Concurrent Omni-Directional Antennas
Physical Interface	2 x 10/100/1000 Gigabit Ethernet Port 1 x Reset Button
LED Indicators	1 x Power 1 x LAN 1 1 x 2.4 GHz 1 x 5 GHz
Power Source	Power-over-Ethernet: Proprietary 24V PoE IEEE 802.11e Compliant Source Active Ethernet (PoE)
Maximum Power Consumption	15W
Surge Protection	Line to Line = 1kV
ESD Protection	Contact: 4kV Air: 8 kV
Wireless & Radio Specifications	
Operating Frequency	Dual-Radio Concurrent 2.4 GHz & 5 GHz
Operation Modes	Access Point Mode (AP mode) Client Bridge Mode (CB mode) WDS: AP Mode and Bridge Mode
Frequency Radio	2.4 GHz: 2400 MHz ~ 2835 MHz 5 GHz: 5150 MHz ~ 5250 MHz, 5250 MHz ~ 5350MHz, 5470 MHz ~ 5725 MHz, 5725 MHz ~ 5850 MHz
Transmit Power	2.4 GHz: 27 dBm 5 GHz: 27 dBm
Tx Beamforming (TxBF)	
Radio Chains/Spatial Stream	2x2:2
SU-MIMO	Two (2) Spatial Stream SU-MIMO up to 1267 Mbps to a single client
MU-MIMO	Two (2) Spatial Stream MU-MIMO up to 1267 Mbps to two (2) MU-MIMO capable wireless devices simultaneously

Supported Data Rates	2.4 GHz: Max 400 Mbps 5 GHz: Max 867 Mbps 802.11b: 1, 2, 5.5, 11 802.11a/g: 6, 9, 12, 18, 36, 48, 54 802.11n: 6.5 to 400 Mbps (MCS0 to MCS15) 802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9, NSS = 1 to 2)
Supported Radio Technologies	802.11b: Direct-Sequence Spread Spectrum (DSSS) 802.11a/g/n/ac: Orthogonal Frequency-Division Multiplexing (OFDM) 802.11n/ac: 2x2 MIMO with 2 Streams
Channelization	802.11ac supports very high throughput (VHT)—VHT 20/40/80 MHz 802.11n supports high throughput (HT)—HT 20/40 MHz 802.11n supports very high throughput (VHT) under the 2.4 GHz radio—VHT (256-QAM) 802.11n/ac packet aggregation: AMPDU, ASPDU
Supported Modulation	802.11b: BPSK, QPSK, CCK 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
Management	Multiple BSSID Supports 16 SSIDs (8 SSIDs per band)
VLAN Tagging	Supports 802.1q SSID-to-VLAN Tagging Cross-Band VLAN Pass-Through Management VLAN
QoS (Quality of Service)	Complaint with IEEE 802.11e Standard Band Steering RSSI Threshold Traffic Shaping Save Configuration as Default Auto-Transmit Power Auto-Channel Selection Site Survey PMK Caching
Distance Control (ACK Timeout)	Multicast Supported Fast Roaming Email Alerts Wi-Fi Scheduler Client Traffic Status Guest Network RADIUS Accounting Power Save Mode (U-APSD Support) CLI Support
SNMP	v1, v2c, v3
MIB	I/II, Private MIB
Wireless Security	WEP Encryption 64/128/152 bit

	WPA/WPA2 Enterprise (WPA-EAP using TKIP or AES) Hide SSID in Beacons MAC Address Filtering, Up to 64 MACs per SSID Wireless STA (Client) Connected List https SSH Client Isolation
Environment & Physical	
Temperature Range	Operating: -4o~140oF/-20oC~60oC Storage: -22Fo~176oF/-40oC~80oC
Humidity (non-condensing)	Operating: 90% or less Storage: 90% or less
Weatherproof	IP55-Rated Enclosure
Dimensions & Weights	ENs620EXT Device Weight: 1.11 lbs (504 g) Width: 7.54" (191.6 mm) Length: 4.49" (114.3 mm) Height" 1.88" (47.7 mm)
Certifications	FCC, CE
Warranty	1 Year

Note: No deviations from the detailed specifications will be considered.

All suppliers are required to indicate lead time for delivery of components.

4 EVALUATION CRITERIA

- 1.1 Selection of suppliers will be based on the 80/20 preference point system.
- 1.2 Indicate CSD number (National Treasury Central Supplier Database) on quotation. If not registered yet on CSD, use www.csd.gov.za to register.
- 1.3 Indicate valid B-BBEE status on quotation:
 - Provide valid original or certified copy of the B-BBEE Certificate issued by an accredited verification agency and bearing a SANAS logo; **or**
 - Valid sworn affidavits made on dti designed templates; **or**
 - dti issued sworn affidavit; **or**
 - CIPC issued B-BBEE certificate.

1.4 No order will be issued or no contract will be signed without a valid CSD number.

1.5 Provide valid tax compliance PIN.

5 PRICING QUOTATION

5.1 Price needs to be provided in South African Rand (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.

5.2 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable, etc.

5.3 Payment will be according to the CSIR Payment Terms and Conditions.

6 OTHER TERMS AND CONDITIONS

6.1 The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any CSIR employee or its representatives. Such an act shall constitute a material breach of the Agreement and the CSIR shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights.

6.2 A validity period of 90 days will apply to all quotations except where indicated differently on the quote.

7 No goods and/or services should be delivered to the CSIR without an official CSIR Purchase order. CSIR purchase order number must be quoted on the invoice. Invoices without CSIR purchase order numbers will be returned to supplier.

8 DECLARATION BY TENDERER

Only tenderers who completed the declaration below will be considered for evaluation.

RFQ No: 5681/20/04/2021.

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / quotation specifications stipulated in RFQ No. **5681/20/04/2021** at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the quotation.

I confirm that I am satisfied with regards to the correctness and validity of my quotation; that the price(s) and rate(s) quoted cover all the services specified in the quotation documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this RFQ as the principal liable for the due fulfilment of this RFQ process.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other RFQ proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT)
CAPACITY
SIGNATURE
NAME OF FIRM
DATE

WITNESSES	
1
2
	DATE: