



BA-PHALABORWA MUNICIPALITY
- BUDGET AND TREASURY _
- PROCUREMENT AND STORES -

TO : Prospective Service Provider
FROM : SCM/STORES
DATE : 15/06/2016
ENQUIRIES : STORES
TELEPHONE : 015 780 6362/61
REF : 125481

Kindly furnish this office with a written quotation for supply of goods/ services as detailed below. The quotation must be submitted on the letterhead of your Business and Brought to our offices/ emailed to MogofeN@ba-phalaborwa.gov.za or not later than 24/06/2016 at 12HOO.

QUANTITY	Description	PRICE/UNIT (Inc .VAT)	DELIVERY PERIOD
09	<i>Integrated radios</i> <i>NB:See attached specifications below</i>		

Please number your quotes (Your Ref no)

The following conditions will apply:

- Price (s) quoted must be valid for **at least thirty (30) days** from date of your offer. ➤ The municipality retains the prerogative to reject any quotes it deems to be excessive ➤ A firm delivery period must be indicated.
- Original Tax Clearance Certificate
- A service provider be registered with Ba-Phalaborwa database
- Registered with CIPRO (CK 1 or 2 document)
- BBBEE Certificate certified by a SANAS accredited institution. ➤ Fill in and Return the Declaration of Interest Form.

The municipality reserves a right not to appoint on the advertised

Specifications

sPectruM

CHANNEL SPACING	Configurable on 5 MHz increments
FREQUENCY RANGE	5150 – 5350 MHz, 5470 - 5875 MHz
CHANNEL WIDTH	20 MHz or 40 MHz

interface

PHYSICAL LAYER	2 x2 MIMO/OFDM
ETHERNET INTERFACE	100 BaseT, PoE (V+ = pins 7 & 8, Return = pins 4 & 5)
PROTOCOLS USED	IPv4, UDP, TCP, IP, ICMP, SSH, SNMPv2c, HTTPs, FTP
NETWORK MANAGEMENT	HTTPs, SSH, FTP, SNMPv2c
VLAN	802.1 Q with 802.1p priority

PerforMance

ARQ	Yes
NOMINAL RECEIVE SENSITIVITY (W/ FEC) @ 20MHZ CHANNEL	MCS1 = -89 dBm to MCS15 = -66 dBm (per branch)
NOMINAL RECEIVE SENSITIVITY (W/ FEC) @ 40MHZ CHANNEL	MCS1 = -86 dBm to MCS15 = -63 dBm (per branch)
MAXIMUM DEPLOYMENT RANGE @ 20 MHz CHANNEL	Up to 13 miles
MODULATION LEVELS (ADAPTIVE)	MCS1 (QPSK 1/2) to MCS15 (64QAM 5/6)
LATENCY (nominal, roundtrip)	17 ms
QUALITY OF SERVICE	Three level priority (Voice, High, Low) with packet classification by DSCP, COS, VLAN ID, IP & MAC Addr, Broadcast, Multicast and Station Priority

link budGet

ANTENNA BEAM WIDTH	24 ° azimuth, 12° elevation
TRANSMIT POWER RANGE	-20 to +23 dBm (combined, to regional EIRP limit) (1 dB interval)
ANTENNA GAIN	13 dBi, integrated patch
MAXIMUM TRANSMIT POWER	23 dBm combined (5.8 GHz Band)

Physical

ANTENNA CONNECTION	Integrated patch antenna
SURGE SUPPRESSION	1 Joule Integrated
ENVIRONMENTAL	IP55
TEMPERATURE	-30 °C to +55°C (-22°F to +131°F)
WEIGHT	0.49 kg (1.1 lb.)
WIND SURVIVAL	145 km/hour (90 mi/hour) with antenna
DIMENSIONS (H x W x D)	29.1 x 14.5 x 8.3 cm (11.4 x 5.7 x 3.3 in)
POWER CONSUMPTION	7 W Maximum, 5 W Typical

INPUT VOLTAGE	24 to 30 V
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security

ENCRYPTION	128- bit AES (CCMP mode)
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certifications

FCCID	Z8H89FT0006
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INDUSTRY CANADA CERT	109W-0006
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CE	EN 302 502 v1.2.1
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	EN 301 893 v1.7.1
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