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Procurement Folder: 1372999

SO Doc Code: CRFQ

Procurement Type: Central Master Agreement

SO Dept: 0803

Vendor ID: 000000206376

SO Doc ID: DOT2400000072

Legal Name: BILLY C MCCALLISTER ELECTRONIC SERVICES INC

Published Date: 3/8/24

Alias/DBA:

Close Date: 3/14/24

Total Bid: \$98,676.00

Close Time: 13:30

Response Date: 03/13/2024

Status: Closed

Response Time: 13:26

Solicitation Description: Addendum No\_1 Hand held two-way radios & batteries 7024C01

Responded By User ID: aaroncarl

Total of Header Attachments: 2

First Name: Aaron

Total of All Attachments: 2

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 Purchasing Division  
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**State of West Virginia  
 Solicitation Response**

**Proc Folder:** 1372999  
**Solicitation Description:** Addendum No\_1 Hand held two-way radios & batteries 7024C01  
**Proc Type:** Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2024-03-14 13:30	SR 0803 ESR03132400000004929	1

**VENDOR**  
 000000206376  
 BILLY C MCCALLISTER ELECTRONIC SERVICES INC

**Solicitation Number:** CRFQ 0803 DOT2400000072  
**Total Bid:** 98676  
**Response Date:** 2024-03-13  
**Response Time:** 13:26:51  
**Comments:**

**FOR INFORMATION CONTACT THE BUYER**

John W Estep  
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 john.w.estep@wv.gov

**Vendor Signature X** **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	radio, battery, desktop charger, antenna, belt clip kit	500.00000	EA	177.000000	88500.00

Comm Code	Manufacturer	Specification	Model #
43191510			

**Commodity Line Comments:** BD502i-V1 136-174MHz Power 1-5 Watts, DMR Tier II and Analog conventional mode

**Extended Description:**

radio, battery, desktop charger, antenna, belt clip kit

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	replacement battery	200.00000	EA	50.880000	10176.00

Comm Code	Manufacturer	Specification	Model #
26111701			

**Commodity Line Comments:** 2000mAh Li-ion Battery (RoHS)

**Extended Description:**

replacement battery



## BD5 SERIES BUSINESS DIGITAL RADIO

SIMPLE, ROBUST, CLEAR-VOICE



Hytera's BD5i series two-way radio is the compact device that provides professional communications and easily operated. Today, communication tools are the key to improved efficiency. When we ask for clear voice, it means a reliable talk, easy-to-hear and understand. Long battery life helps you to maintain control. A rugged and robust device takes the worry out of communicating. High-performance but simple operation will make everything go easy.

Hytera understands customers' requirements and meets them all in one. With lightweight, easy-operation, excellent performance, long battery life and reliability. We redefine a business radio using Hytera digital technology and quickly responding to what you need.



BD502i

BD552i

### EXCELLENT PERFORMANCE

With innovative design, BD5i series has better performance than analog radios. Excellent reception ability makes talk range further extended. DMR digital radios with good performance and negligible interference, provide stable communication.

### RUGGED AND RELIABLE

BD502i/BD552i is designed and tested to meet Military Standards 810 G, including temperature shock, vibration, high & low temperature and humidity. IP54 dust and water-proof design guarantees the reliability in different environments. Based on TDMA technology, the radio can work longer, up to 22 hours in digital mode.

### CLEAR VOICE

With digital encoding and correction technology, human voice is transmitted clearer without noise, even over greater distance. This is a new experience of improved audio quality.



## PROFESSIONAL AND SIMPLE TO USE

**A/D ANALOG & DIGITAL DUAL MODES**  
BD502i/BD552i can support both analog and digital modes on the same hardware. You can switch between two operation modes easily and it helps you to communicate with analog radios.

**ANALOG & DIGITAL AUTO DETECT**  
BD502i/BD552i can detect the signal type when receiving a call, then automatically switches between analog mode and digital mode. During the call hang time, user can reply by using the push-to-talk. This is migration technology from analog to digital.

**EXTENDED TALK RANGE**  
Based on Hytera innovative technology, your talk range is extended.

**LONG WORKING TIME**  
Based on TDMA technology, BD5i series in digital mode can work upto 16 hours @ 1500mAh or 22 hours @ 2000mAh in 5-5-90 mode.

**CLEAR VOICE**  
Excellent audio quality comes from the DMR digital technology, which makes communication more reliable.

**RELIABLE AND DURABLE**  
BD502i/BD552i is compliant with MIL-STD-810 G and IP54.

**ANTI-INTERFERENCE**  
Adopted digital encoding and error correcting module, BD5i series has the ability to avoid signal interference on the same frequency.

**DMR DMR SIGNALING**  
With DMR signaling, transmitting group call, private call and all call with PTT ID becomes quite easy.

**REPEATER MODE OPERATION**  
Utilize a DMR Tier II repeater to extend your communication range.







**VOICE ANNOUNCEMENT (only for BD502i)**  
Channel number announcement helps you to switch channels quickly and correctly, even in operations with low visibility.

**VOX**  
This feature allows you to activate the radio microphone via your voices volume, and frees your hand from PTT.




















**SCANNING**  
Allow BD5i series listening to communication activities on other channels.

# ACCESSORIES

## STANDARD ACCESSORIES

 <p><b>AN0435W09</b> Whip Antenna, 400-470MHz,<sup>①</sup> 16cm</p>	 <p><b>BL1506</b> 1500mAh Li-ion battery</p>	 <p><b>CH10L23</b> BD5i standard drop- in single unit charger</p>	 <p><b>BC08</b> Belt clip</p>	 <p><b>RO03</b> Nylon hand strap</p>	 <p>Power Adapter input: 100-240VAC, output: 12VDC/1A  <i>US/UK/AU/EU/CHINA/JAPAN /KOREA</i></p>
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## OPTIONAL ACCESSORIES

 <p><b>EHM15</b> D-style earpiece with in-line PTT &amp; MIC <i>VOXswitch</i></p>	 <p><b>EHM18</b> C-style earpiece with in-line PTT &amp; MIC <i>VOXswitch</i></p>	 <p><b>ESM12</b> Ear-bud with PTT on MIC  <i>VOXswitch</i></p>	 <p><b>EAM12</b> Ear-bud with PTT on MIC  <i>VOXswitch</i></p>	 <p><b>EAM13</b> 2-wire surveillance earpiece  <i>VOXswitch</i></p>
 <p><b>ACM-01</b> PTT&amp;MIC-only with 3.5mm jack <i>Ip54</i></p>	 <p><b>ES-01</b> Receive-only ear-bud</p>	 <p><b>ES-02</b> Receive-only surveillance earpiece</p>	 <p><b>EH-01</b> Receive-only C style earpiece</p>	 <p><b>EH-02</b> Receive-only earhook speaker</p>
 <p><b>PC76</b> Data programming cable</p>	 <p><b>SM08M3</b> Remote speaker microphone  <i>with 3.5mm audio jack</i></p>	 <p><b>SM26M1<sup>①</sup></b> Remote speaker microphone  <i>Ip54 with 2.5mm audio jack</i></p>	 <p><b>LCBN13</b> Universal nylon chest Pack</p>	 <p><b>NCN011</b> Nylon carrying jacket</p>
 <p><b>BL2018</b> 2000mAh Li-ion battery</p>	 <p><b>MCL19</b> BD5i multi-unit charger</p>	 <p><b>AN0435H13</b> Stubby antenna,400-470MHz,<sup>②</sup> 9cm</p>	 <p><b>CHV09</b> Vehicle adapter (Input: 11-25V DC, Output: 12V DC &amp; 1A)</p>	

① SM26M1 can be used with earpieces EA503,EHS17/18,ESS10.

② AN0435H13: 400-470MHz, 9cm    AN0141H06: 136-147MHz, 17cm    AN0167H06: 160-174MHz, 17cm    AN0153H08: 147-160MHz/1575MHz, 12cm  
AN0435W09: 400-470MHz, 16cm    AN0153H07: 147-160MHz, 17cm    AN0160H13: 146-174MHz, 15cm    AN0167H07: 160-174MHz/1575MHz, 12cm

# SPECIFICATION

General		
Frequency Range	UHF:400-470 MHz VHF:136-174 MHz	
Channel Capacity	BD502i: 48, BD552i: 256	
Zone Capacity	BD502i: 3, BD552i: 16	
Channel Spacing	25/12.5KHz	
Operating Voltage	7.2V	
Display	BD502i without display BD552i with display (0.91")	
Battery	1500mAh (Li-Ion) 2000mAh (Li-Ion)	
Battery Life (5/5/90)	Analog/Digital: 12/16 hours (1500mAh) 16/22 hours (2000mAh)	
Weight	BD502i: 240g, BD552i: 250g (With AN0435W09 and BL1506)	
Dimensions	BD502i: 108×54×28mm BD552i: 110×59×30mm	
Frequency Stability	±0.5ppm	
Antenna Impedance	50Ω	
Receiver		
Sensitivity (Digital)	0.22μV / BER 5%	
Sensitivity (Analog)	0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)	
Adjacent Selectivity	TIA-603	60dB @ 12.5KHz/70dB @ 25KHz
Spurious Response Rejection	TIA-603	70dB @ 12.5/25KHz
Inter-modulation	TIA-603	65dB @ 12.5/25KHz
Hum & Noise	40dB @ 12.5KHz 45dB @ 25KHz	
Rated Audio Power Output	0.5W	
Rated Audio Distortion	≤3%	
Audio Response	+1 ~ -3dB	
Conducted Spurious Emission	<-57dBm	

Transmitter	
RF Power Output	VHF High power: 5W VHF Low power: 1W UHF High power: 4W UHF Low power: 1W
FM Modulation	11K0F3E @ 12.5KHz 16K0F3E @ 25KHz
4FSK Digital Modulation	12.5KHz Data Only: 7K60FXD 12.5KHz Data & Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz, -30dBm >1GHz
Modulation Limiting	±2.5KHz @ 12.5KHz ±5.0KHz @ 25KHz
FM Hum & Noise	40dB @ 12.5KHz 45dB @ 25KHz
Adjacent Channel Power	60dB @ 12.5KHz, 70dB @25KHz
Audio Response	+1 ~ -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE+2™
Digital Protocol	ETSI-TS102 361-1,-2,-3

Environmental	
Operating Temperature	-30°C~ +60°C
Storage Temperature	-40°C~ +85°C
ESD	IEC 61000-4-2 (Level 4) ±8kV (Contact) ±15kV (Air)
Dustproof & Waterproof	IP54 Standard
Humidity	Per MIL-STD-810 G Standard
Shock & Vibration	Per MIL-STD-810 G Standard

All specifications are subject to change without notice due to continuous development.



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## Estimate

**ADDRESS**

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BUCKHANNON, WV 26201  
US

**SHIP TO**

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CROSSING  
PO BOX 610  
BUCKHANNON, WV 26201  
US

**ESTIMATE # 3220**

**DATE 03/13/2024**

**TRACKING NO.**

CRFQ-0803-DOT2400000072-2

**MEMO**

Motorola

SKU	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
BD502i-V1	<b>Two-Way:BD502i-V1</b>	Power 1-5 Watts, DMR Tier II and Analog conventional mode	500	177.00	88,500.00
BL2018	<b>Two-Way:BL2018</b>	2000mAh Li-ion Battery (RoHS)	200	50.88	10,176.00

CRFQ-0803-DOT2400000072-2

SUBTOTAL	98,676.00
TAX	0.00
<b>TOTAL</b>	<b>\$98,676.00</b>

Accepted By

Accepted Date