



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at wvOASIS.gov. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at WVPurchasing.gov with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 2

List View

General Information | [Contact](#) | [Default Values](#) | [Discount](#) | [Document Information](#) | [Clarification Request](#)

Procurement Folder: 939827

Procurement Type: Central Master Agreement

Vendor ID: 000000206376

Legal Name: BILLY C MCCALLISTER ELECTRONIC SERVICES INC

Alias/DBA:

Total Bid: \$0.00

Response Date: 10/09/2021

Response Time: 10:07

Responded By User ID: aaroncarl

First Name: Aaron

Last Name: McCallister

Email: wvesi@aol.com

Phone: 304-586-0024

SO Doc Code: CRFQ

SO Dept: 0803

SO Doc ID: DOT2200000049

Published Date: 10/8/21

Close Date: 10/19/21

Close Time: 13:30

Status: Closed

Solicitation Description: Addendum #1 HANDHELD TWO-WAY RADIOS & BATTERIES

Total of Header Attachments: 2

Total of All Attachments: 2



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**State of West Virginia
 Solicitation Response**

Proc Folder: 939827
Solicitation Description: Addendum #1 HANDHELD TWO-WAY RADIOS & BATTERIES
Proc Type: Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2021-10-19 13:30	SR 0803 ESR10092100000002306	1

VENDOR
 000000206376
 BILLY C MCCALLISTER ELECTRONIC SERVICES INC

Solicitation Number: CRFQ 0803 DOT2200000049
Total Bid: 0
Response Date: 2021-10-09
Response Time: 10:07:03
Comments:

FOR INFORMATION CONTACT THE BUYER
 Jessica L Hovanec
 304-558-2314
 jessica.l.hovanec@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	HANDHELD TWO-WAY RADIO	0.00000	EA	187.800000	0.00

Comm Code	Manufacturer	Specification	Model #
43191510			

Commodity Line Comments: HYTERA BD502

Extended Description:

HANDHELD TWO-WAY RADIO

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	REPLACEMENT BATTERIES	0.00000	EA	46.190000	0.00

Comm Code	Manufacturer	Specification	Model #
43191510			

Commodity Line Comments: HYTERA 2000mAh

Extended Description:

REPLACEMENT BATTERIES

BD5 SERIES



BD502i and BD552i Two-Way DMR Radios

Compact UHF and VHF BD5i Series radios provide cost-effective and easy-to-use radio communications with excellent performance



Excellent Performance

The BD5i Series radios provide high-quality voice communications with an audio equalizer, and long battery life for up to 16 hours of operation. Excellent reception and digital encoding extends the range of operation. Optional Bluetooth (BD552i-BT) supports wireless audio accessories.

Light and Compact

Weighing less than 9 ounces, the light and compact design makes the BD5i Series easy to carry and operate.

Analog and Digital

Supports both analog and digital DMR operation and can automatically switch between the two modes. This provides flexible operation, and provides an easy and cost-effective upgrade path to digital systems.

Rugged and Reliable

The BD5i Series radios meet MIL-STD-810-G for shock and vibration, and are IP54 rated for dust and water resistance to guaranty reliability in harsh environments.



Key Features

A/D ANALOG AND DIGITAL DUAL MODES

- Supports both analog and digital modes
- Allows switching between the two operation modes for communication with analog radios

ANALOG AND DIGITAL AUTO DETECT

- Detects the signal type and automatically switches between analog and digital mode
- Enables simple and cost-effective migration path to digital

RELIABLE AND DURABLE

- Compliant with MIL-STD-810-G for shock and vibration
- IP54 rated for water and dust resistance

AUDIO CHANNEL ANNOUNCEMENT

- Voice announcement of channel number for quick and accurate channel switching, even in low visibility (BD502i only)

BUILT-IN BLUETOOTH

- Built-in Bluetooth enables connectivity to earpieces and other wireless accessories (BD552i-BT models only)

OLED DISPLAY

- High contrast display for Channel number, Caller ID, Zone number, battery power, and high/low power (BD552i only)

LONG-LIFE BATTERY

- Powerful 1500mAh Lithium Ion batteries deliver up to 16 hours of operation in digital mode and 12 in analog mode



HIGH QUALITY AUDIO

- Audio equalizer adjusts low, mid, and high frequency gain
- Provides the best audio performance in noisy or quiet environments



ANTI-INTERFERENCE

- Digital encoding and error correcting reduces signal interference on the same frequency



DMR

- DMR signaling enables group call, private call, and all call transmitting with PTT ID
- Supports DMR Tier II repeaters to extend coverage



PSEUDO TRUNKING

- This virtual trunking feature automatically uses whichever digital timeslot is free to improve call connectivity and frequency efficiency



VOX

- Voice activated microphone enables hands free operation
- Also supported on external earpiece and microphone accessories



SCANNING

- Allows listening to communication activities on other channels







Standard Accessories

					
AB0435W09 16cm Whip Antenna 400-470MHz	BL1506 1500mAh Li-Ion Battery	BC08 Belt Clip	CH10L23 Drop-In Single Unit Charger	R003 Nylon Hand Strap	Power Adapter Input: 100-240VAC Output: 12VDC/1A

Optional Accessories


EARPIECES

External earpieces with in-line PTT Mics and a VOX (hands free) switches


		
EHM15-A D-Style Earloop	EHM18 C-Style Earloop	ESM12 Earbud
		
EAM12 Transparent Acoustic Tube Earpiece	EAM13 2-Wire Surveillance Transparent Acoustic Tube Earpiece	ACM-01 ^① PTT and Mic with 3.5mm Jack Connects to a variety of Receive-only Earpieces

BLUETOOTH

BD552-BT models support Bluetooth accessories that enable wireless audio and Push-to-Talk

	
ESW-01 Bluetooth earpiece with charger (requires PS1030 power adapter)	POA121 PTT Bluetooth Ring (attaches to finger or handlebars)

POWER ACCESSORIES

		
BL2018 2000mAh Li-Ion Battery Provides 22 hours operation in Digital Mode (16 Analog)	MCL19 Multi-unit Charger for Six Radios (includes power supply)	CHV09 Vehicle Adapter (Input: 11-25V DC, Output: 12V DC & 1A)

REMOTE SPEAKER MICROPHONES

Remote Speaker Mics provide easy access for audio, are IP rated for water resistance, and have audio jacks for receive-only earpieces.

		
SM08M3 ^① IP54 Rated 3.5mm audio jack	SM13M1 ^① Noise Cancelling with High / Low Speaker Volume IP55 Rated, 3.5mm audio jack	SM26M1 ^② IP54 Rated 2.5mm audio jack

OTHER ACCESSORIES

		
PC76 Data Programming Cable	Stubby Antenna ^③	NCN011 Nylon Carrying Jacket

① Features 3.5mm jack for receive-only ES01 Earbud, ES02 Acoustic Tube Surveillance Earpiece, EH01 C-Style Earpiece, and EH02 Swivel C-Style Earpiece

② Features 2.5mm jack for receive-only EAS03 Acoustic Tube Earpiece, EHS18 Earloop Earpiece, and ESS10 Earbud

③ 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

Specifications

General	
Frequency Range	UHF: 400-470 MHz VHF: 136-174 MHz
Channel Capacity	BD502i: 48 Channels (24 Analog, 24 Digital) BD552i: 256 Channels (128 Analog, 128 Digital)
Zone Capacity	BD502i: 3 Zones with 16 Channels per Zone BD552i: 16 Zones with 16 Channels per Zone
Channel Spacing	25/12.5kHz
Operational Voltage	7.2W
Battery	1500mAh (Li-Ion) Standard, 2200mAh Optional
Battery Life (5/5/90)	1500mAh: 16 hours Digital, 12 hours Analog 2200mAh: 22 hours Digital, 16 hours Analog
Weight	BD302i: 8.5 ounces (240g) BD352i: 8.8 ounces (250g) (with AN0435W09 antenna and BL1506 battery)
Dimensions	BD502i and BD552i: 4 1/4" x 2 1/8" x 1 5/32" (108 x 54 x 29mm)
Frequency Stability	± 0.5ppm
Antenna Impedance	50Ω
Display	BD352i: 0.91" OLED single-line display
Receiver	
Digital Sensitivity	0.22μV (BER 5%)
Analog Sensitivity	0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)
Adjacent Selectivity	TIA-603: 60dB @ 12.5kHz, 70dB @ 25kHz
Spurious Response Rejection	TIA-603: 70dB @ 12.5/25kHz
Intermodulation	TIA-603: 65dB @ 12.5/25kHz
Hum and Noise	40dB @ 12.5kHz, 45dB @ 25kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤5%
Audio Response	+1 to -3dB
Conducted Spurious Emission	<-57dBm

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



Hytera North America

3315 Commerce Parkway, Miramar, FL 33025, United States
Telephone (954) 846-1011

8 Whatney, Suite 200, Irvine, CA 92618, United States
Telephone (949) 326-5740

100 Leek Crescent, Unit 11, Richmond Hill, ON L4B 3E6, Canada
Telephone (905) 305-7545



HYT, Hytera are registered trademarks of Hytera Communications Co., Ltd.

© 2020 Hytera Communications Co., Ltd. All Rights Reserved.

Hytera retains right to change the product design and specification.

BD5I-DS-B 4/20

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 and Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz / -30dBm >1GHz
Modulation Limiting	±2.5kHz @ 12.5kHz ±5.0kHz @ 25kHz
FM Hum and Noise	40dB @ 12.5kHz, 45dB @ 25kHz
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 25kHz
Audio Response	+1 to -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE++
Digital Protocol	ETSI-TS102 361-1,-2,-3
Environmental	
Operating Temperature	-22°F to +140°F (-30°C to +60°C)
Storage Temperature	-40°F to +185°F (-40°C to +85°C)
ESD	IEC 61000-4-2 (Level 4) ±8kV Contact, ±15kV Air
Dust and Water Ingress	IP54 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock and Vibration	Per MIL-STD-810 C/D/E/F/G Standard

Ordering Information

Part Number	Description
BD502i-V1	VHF 136-174MHz, 48 Channels
BD502i-U1	UHF 400-470MHz, 48 Channels
BD552i-V1	VHF 136-174MHz, 256 Channels, OLED display
BD552i-U1	UHF 400-470MHz, 256 Channels, OLED display
BD552i-BT-V1	VHF 136-174MHz, 256 Channels, OLED display, Bluetooth
BD552i-BT-U1	UHF 400-470MHz, 256 Channels, OLED display, Bluetooth

Billy C. McCallister Electronic Services Inc.
 PAYMENT REMIT ADDRESS:PO BOX 56
 SPENCER, WV 25276
 8800 STATE ROUTE 34, PO BOX 474
 WINFIELD
 WV 25213
 304-586-0024
 support@esivv.net
 www.esivv.net



Estimate

ADDRESS

DIVISION OF HIGHWAYS,
 EQUIPMENT DIVISION RT 33
 83 BRUSHY ROAD
 CROSSING
 PO BOX 610
 BUCKHANNON, WV 26201
 US

SHIP TO

DIVISION OF HIGHWAYS,
 EQUIPMENT DIVISION RT
 33
 83 BRUSHY ROAD
 CROSSING
 PO BOX 610
 BUCKHANNON, WV 26201
 US

ESTIMATE # 2141

DATE 09/26/2021

TRACKING NO.

CRFQ 0803 DOT2200000049

SKU	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
BD502i-V1	BD502i-V1	Power 1-5 Watts, DMR Tier II and Analog conventional mode w/ 2000 maH battery BL2018	200	187.80	37,560.00T
BL2018	BL2018	2000mAh Li-ion Battery (RoHS)	200	46.19	9,238.00T

HYTERA
 CRFQ 0803 DOT2200000049
 HANDHELD TWO WAY RADIOS & BATTERIES

SUBTOTAL 46,798.00
 TAX 0.00
TOTAL \$46,798.00

Accepted By

Accepted Date