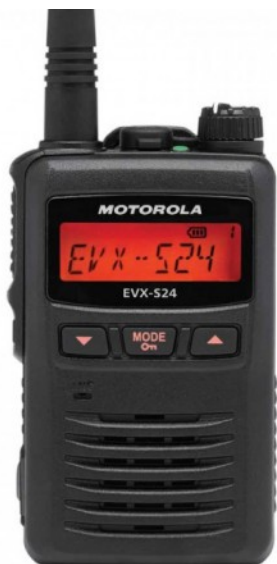# MOTOROLA EVX-S24 PORTABLE DIGITAL TWO-WAY RADIO

Brand: Motorola
Product Code: EVX-S24

Price: $445.50

Description

Give your team members a compact, discreet, and lightweight radio that allows them to be comfortable in any situation.

Worn on a belt, tucked away in a pocket or clipped to a lapel, the water-submersible and dust-proof EVX-S24 is designed to survive demanding conditions. It operates in both analog and digital modes, so it's ideal for use with mixed fleets. And in digital mode, enjoy noise cancellation for crisp audio and clear conversations.

GENERAL FEATURES

• Water Submersible and Dust Proof (IP67)

• Channel Capacity: - 256 Channels/ 16 Groups

• 4 Programmable Keys

• 8 Character Alphanumeric Display

• Safety Features: - Lone Worker Alert - Emergency Alert

• Multiple Scan Options

• Better Radio Call Quality with AMBE+2™ Vocoder

• Battery Status Indicator (Low Battery Alert)

• Battery Saver

• Busy Channel Lock Out (BCLO)

• Time Out Timer

• Key Lock

• AF Minimum Volume

• Auto Power Off

• Escalating Alerts

• Low Power

• Whisper Mode

• RSSI Indicator

• Internal VOX (VH-190 Required) SIGNALING FEATURES

• MDC-1200® ANI Encode - MDC-1200 ANI - MDC-1200 Call Alert - MDC-1200 Sell Call - MDC-1200 Radio Check - MDC-1200 Stun/Revive

• Fleet Sync® ANI Encode

• CTCSS/DCS Encode and Decode

• 2-Tone Encode/Decode

• 5-Tone Encode/Decode

• Stun/Kill/Revive (5-Tone and DTMF Pager)

• DTMF Encode/Decode

• DTMF ANI

• DTMF Paging

• DTMF Speed Dial ANALOG MODE FEATURES

• Busy Tone Lock out (BTLO)

• Auto Range Trans ponding System (ARTS™)

• Voice Inversion Encryption DIGITAL MODE FEATURES

• Direct Mode

• Transmit Interrupt

• Site Search

• Message Control and Privacy

• Text Message

• All, Group and Private Call

• Basic and Enhanced Privacy

• Radio Check

• Radio STUN/REVIVE

• Remote Monitor (Decode)

• Call Alert

• Call History

• Simplex Only and Repeater Capable Encryption

• Emergency

• Radio Enable/Disable

GENERAL SPECIFICATIONS

Frequency Range	UHF: 403 – 470 MHz
Dimension (H x W x D)	3.58 x 2.17 x 1.24 Inches (91 x 55 x 31.5 mm)
Weight Approx. with Antenna, Belt Clip	7.6 oz [215 g] with [FNB-V142LI, ATU-20, Belt Clip]
Display	8 Character Alphanumeric
Channel Spacing	25/12.5 kHz
Number of Channels and Groups	256/16
Programmable Buttons	4 (Front: 3, Side: 1)
Battery Life [5-5-90 Duty with Battery Saver]	Digital 3W: 12 Hours/Analog 2W: 11 Hours
IP Rating	67
Power Supply Voltage	3.7 VDC (Nominal)
Operating Temperature Range	-22º F to +140º F (-30º C to +60º C)
Frequency Stability	± 1.5 ppm
RF Input-Output Impedence	50 Ohms

RECEIVER SPECIFICATIONS

measured by TIA/EIA 603

Sensitivity	Analog 12 dB SINAD: 0.25 uV
	Digital 1% BER: 0.28 uV
Adjacent Channel Selectivity	TIA603: 70/60 dB (25 kHz/12.5 kHz)
	TIA603D: 70/45 dB (25 kHz/12.5 kHz)
Intermodulation	70 dB
Spurious Rejection	70 dB
Audio Output	500 mW @ 4 Ohms 10 % THD
FM Hum and Noise	45/40 dB (25 kHz/12.5 kHz)
Conducted Spurious Emission	-57 dBm

TRANSMITTER SPECIFICATIONS

measured by TIA/EIA 603

Output Power	Digital 3 W/2 W/1 W/0.5 W, Analog 2 W/1 W/0.5 W
Modulation Limiting	± 5 kHz (25 kHz); ± 2.5 kHz (12.5 kHz)
Conducted Spurious Emission	-36 dBm (≤1 GHz), -30 dBm (>1 GHz)
FM Hum and Noise	45/40 dB (25 kHz/12.5 kHz)
Audio Distortion	< 5 % @ 1 kHz
Adjacent Channel Power	70/60 dB
Analog FM Modulation	16K0F3E [25 kHz], 11K0F3E [12.5 kHz]
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D/7K60FXD 12.5 kHz Voice: 7K60F1E/7K60FXE Combination of 12.5 kHz Voice and Data: 7K60F1 W
Digital Vocoder Type	AMBE+2
Digital Protocol	ETSI102 361-1, -2, -3

APPLICABLE MIL-STD

Standard	MIL 810C	MIL 810D	MIL 810E	MIL 810F	MIL 810G
			Methods/Procedures		
Low Pressure	500.1 proc 1	500.2 proc 2	500.3 proc 2	500.4 proc 1/2	500.5 proc 1/2
High Temperature	501.1 proc 1/2	501.2 proc 1/A1 proc 2/A1	501.3 proc 1/A1 proc 2/A1	501.4 proc 1/HOT proc 2/HOT	501.5 proc 1/A1 proc 2/A2
Low Temperature	502.1 proc 1	502.2 proc 1/Cat 3 proc 2/Cat 1	502.3 proc 1/Cat 3 proc 2/Cat 1	502.4 proc 1/Cat 3 proc 2/Cat 1	502.5 proc 1/Cat 3 proc 2/Cat 1 proc 3/Cat 1
Temperature Shock	503.1 proc 1	503.2 proc 1/A1 Cat 3	503.3 proc 1/A1 Cat 3	503.4 proc 1	503.5 proc 1/C
Solar Radiation	505.1 proc 2	505.2 proc 1	505.3 proc 1	505.4 proc 1	505.5 proc 1/A1
Rain	506.1 proc 1/2	506.2 proc 1/2	506.3 proc 1/2	506.4 proc 1/3	506.5 proc 1/3
Humidity	507.1 proc 2	507.2 proc 2	507.3 proc 2	507.4	507.5 proc 2/Agg
Salt Spray/Fog	509.1 proc 1	509.2 proc 1	509.3 proc 1	509.4	509.5
Dust	510.1 proc 1	510.2 proc 1	510.3 proc 1	510.4 proc 1	510.5 proc 1
Blowing Sand	–	510.2 proc 2	510.3 proc 2	510.4 proc 2	510.5 proc 2
Vibration	514.2 proc 8/F, W	514.3 proc 1/Cat 10 proc 2/Cat 3	514.4 proc 1/Cat 10 proc 2/Cat 3	514.5 proc 1/Cat 24	514.6 proc 1/Cat 24
Shock	516.2 proc 1/2/3/5	516.3 proc 1/4/6	516.4 proc 1/4/6	516.5 proc 1/4/6	516.6 proc 1/4/6

ACCESSORIES

Antennas

- ATU-6A: 400-430 MHz 6.5" (16.51 cm)
- ATU-6B: 420-450 MHz 6.1" (15.49 cm)
- ATU-6C: 440-470 MHz 6.1" (15.49 cm)
- ATU-6D: 450-485 MHz 6" (15.24 cm)
- ATU-20AS: Stubby 400-430 MHz 3.15" (8 cm)
- ATU-20CS: Stubby 420-450 MHZ 3.15" (8 cm)
- ATU-20DS: Stubby 440-470 MHz 3.15" (8 cm)
- ATU-20FS: Stubby 450-480 MHz 3.15" (8 cm)
- ATU-21AS: Super Stubby 400-420 MHz 2" (5,08 cm)
- ATU-21CS: Super Stubby 420-440 MHz 2" (5,08 cm)
- ATU-21DS: Super Stubby 440-460 MHz 2" (5,08 cm)
- ATU-21FS: Super Stubby 460-480 MHz 2" (5,08 cm)

Battery

- PMNN4468: 2300 mAh Li-Ion Battery

Carry Solutions

- LCC-S24: Leather Case, Belt Loop
- LCC-S24S: Leather Case, Swivel Belt Loop
- Clip-27: Belt Clip

Chargers

- PA-57: Power Adapter
- CD-65: Standard Single Unit Charging Cradle
- CD-66: Enhanced Single Unit Charging Cradle
- VAC-6066: Multi Unit Charger

Audio Accessories

- MH-89A4B: Earpiece Microphone
- MH-90A4B: Compact Speaker Microphone
- MH-66F4B: IP57 Submersible Speaker Microphone
- VH-190: VOX Lightweight Headset, Behind-the-Head

EVX-S24 Black

CRS-2WLAT-Y4

50 +0 -30

680 +0 -40

860 +0 -50

(mm)

Description

2 Wire Long Acoustic Airtube with Inline PTT/Microphone

The two wire long acoustic airtube earpiece is one of our most popular designs and is perfect for covert surveillance where discreet communication is essential. The 2wire harness splits into two at the PTT/Mic enabling the user to conceal the cable underneath their clothing with the earpiece running up from the back of the collar/tshirt, etc.
The speaker transducer gives exceptional audio output. The heavy duty PTT design coupled with the sensitive Electret condenser microphone makes this a perfect product for discreet communication in complex environments. The threaded airtube can be removed easily to enable JUST THE ACOUSTIC AIRTUBE to be made personal issue for staff – GREAT SAVING.

Suitable for all industry types but a particular favourite with security, police, casinos, night clubs, hotel personnel, restaurants, private detectives, event co-ordinators...

MH-66F4B Submersible Speaker Microphone

Reduce background noise with this noise-cancelling, rugged, high performance Remote Speaker Microphone (RSM). With a 360 degree mounting clip, the RSM can be adjusted to meet the unique needs of each user.

It is waterproof and dust proof. Meets IP57 specifications for dust and water submersion: 3 feet for 30 minutes.