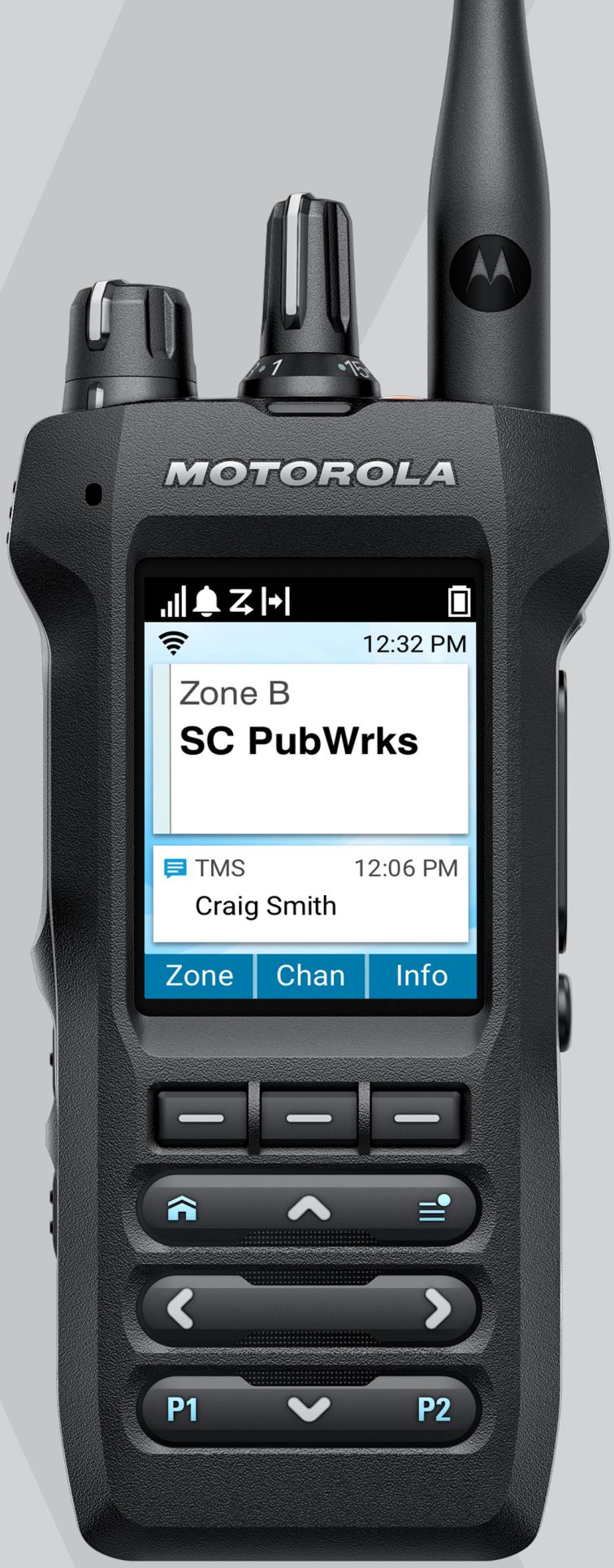


APX N30

SINGLE-BAND P25 PORTABLE TWO-WAY RADIO

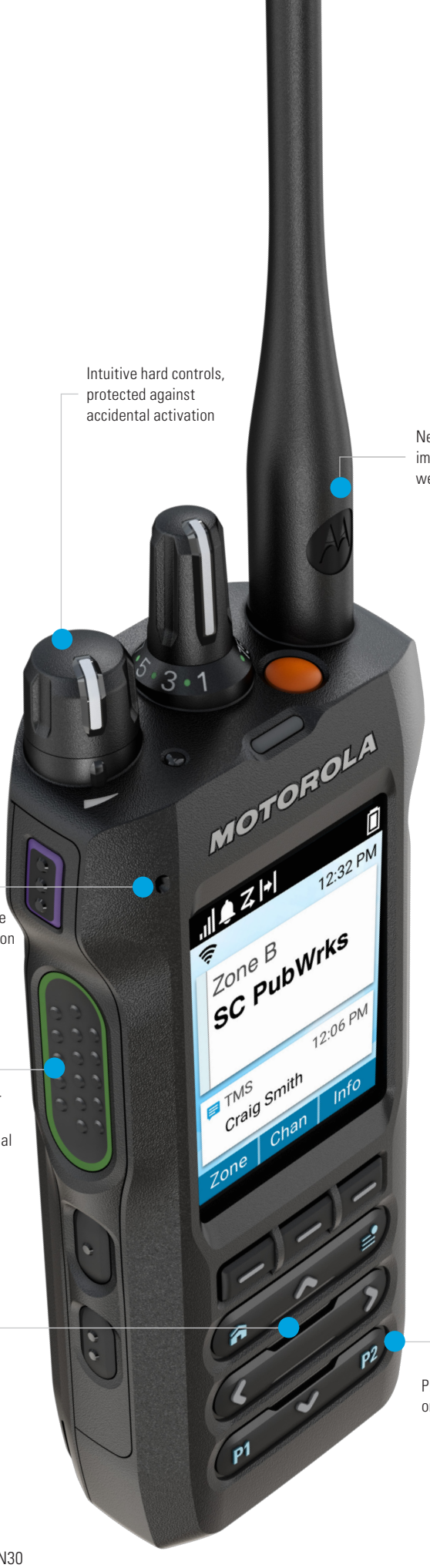
EASY. EFFICIENT. ESSENTIAL.

Seamless communication from a sleek radio. Easy to use and simple to manage. The APX N30 single-band P25 portable radio connects your teams to reliable P25 radio networks with all the essential features they need and nothing that they don't. The radio solution for mobile workers in public works, government services, education teams and other municipal roles looking for APX performance in a pared down, cost effective package.

Small and sleek, it's a radio that's easy to carry while being tough enough for use in harsh environments. ViQi Basic Voice Control, large controls and display make it simple to use on the go. And with loud and clear audio, crucial messages get through, even in noisy environments.

The APX N30 works reliably and securely across a variety of frequencies, modes and protocols. It connects seamlessly with accessories and other devices via Bluetooth or Wi-Fi. With SmartConnect, it can even switch between radio coverage and Wi-Fi connections. Choose whether to program offline or optimize fleet management by programming them in batches to save valuable time and resources. With a portfolio of services and tech support, radios stay safe and reliable throughout their lifetime.

MOTOROLA SOLUTIONS



Intuitive hard controls, protected against accidental activation

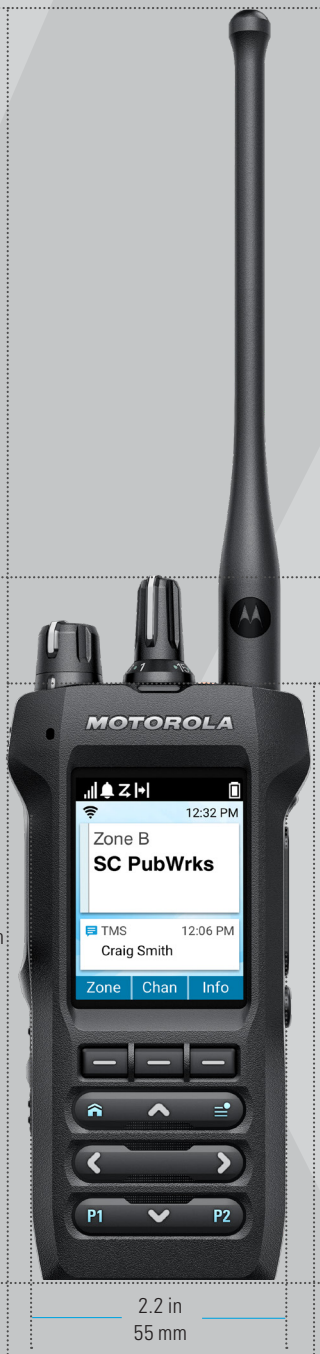
New antenna technology improves comfort and wearability

2 microphones capture audio from any direction

Distinctive buttons for PTT, emergency and ViQi, and two additional programmable side buttons

Custom speaker for loud and clear communications

Programmable buttons for one-touch quick access



11.2 in
285 mm

6.1 in
156 mm

5.3 in
135 mm

2.2 in
55 mm

1.3 in
33 mm

2.6 in
66 mm

FEATURES

OPERATION MODES

- Digital Conventional: 9600 Baud APCO P25 phase 1 FDMA and phase 2 TDMA
- Digital Conventional: APCO 25
- Analog Conventional: 3600 Baud SmartNet®, SmartZone®, Omnilink®
- Analog Conventional: MDC 1200
- ASTRO® 25 Integrated Voice and Data
- SmartConnect via W-iFi[1]

FREQUENCY BANDS

- 7/800 MHz
- Up to 512 channels
- Up to 50 Zones

ADDITIONAL CONNECTIVITY

- Bluetooth (Version 4.2)
- Wi-Fi 802.11 a/b/g/n/ac, 2.4 and 5 GHz Bands

AUDIO FEATURES

- 2 High Dynamic Range (HDR) Microphones
- Adaptive Dual-sided Operation
- Adaptive Equalization
- Adaptive Gain Control
- IMPRES Audio Accessory Compatibility

MANAGEMENT

- Customer Programming Software (CPS)
- Radio Management (RM)

LOCATION-TRACKING

- Built-in GNSS (GPS, GLONASS)

SENSORS

- Accelerometer (Man Down/Fall Alert)

SECURITY

- 256-bit AES Software Encryption[1]
- Single-key ADP encryption
- Software Key
- P25 Authentication1
- Multikey for 48 keys

HAZLOC

- Class I, Division 1, Groups C, D
- Class II, Division 1, Groups E, F, G
- Class III, Hazardous Locations
- Class I, Division 2, Groups A, B, C, D when used with 3200 mAh Div 1 Battery

MESSAGING

- Canned Messages

VOICE INTERACTION

- Customizable Voice Announcements
- ViQi Basic Voice Control: Actions with Predetermined Commands[1]

ENERGY

- Standard 2850 mAh Battery
- Optional UL Div 1 3200 mAh Battery
- IMPRES 2 Smart Battery Technology

OTHER FEATURES

- Radio Profiles
- Enhanced Data[1]
- Multicast Voting Scan[1]
- Man Down/Fall Alert[1]
- DVRS PSU[1]
- Digital Tone Signaling[1]
- APX Personnel Accountability[1]
- Instant Recall
- Geofence
- Data Modem Tethering
- Group Services

INGRESS PROTECTION

- IP6x Dust
- IPx8 submersion (2 m, 2 hr)

USER INTERFACE

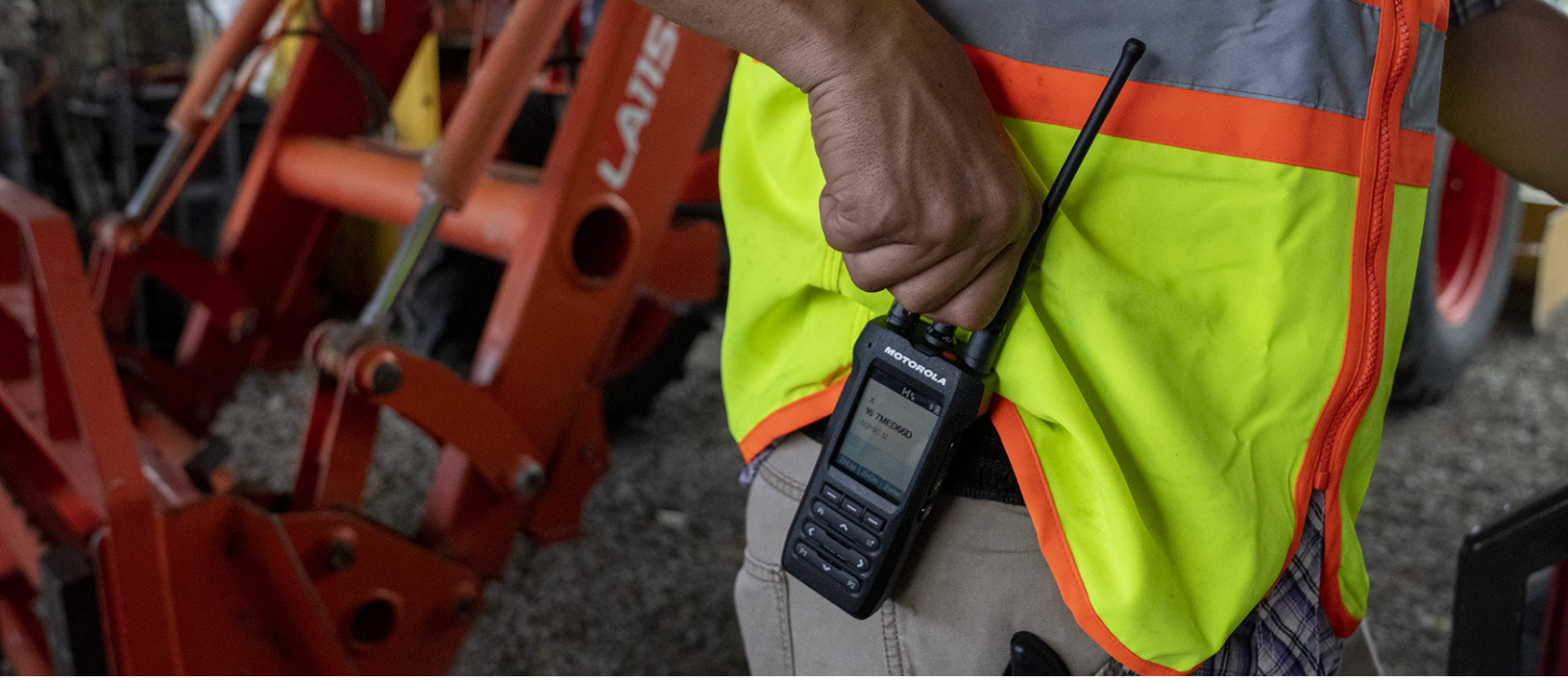
- 2.4" Mission-critical Display: 240x320 TFT 65k Color Transflective Display
- PTT Button: 1.22 x 0.47 in (31 x 12 mm)
- 16-position Channel Selector
- Power/Volume Knob
- Orange Emergency Button
- 3 Programmable Side Buttons (1-dot, 2-dot, purple/3-dot)
- 2 Programmable Front Buttons

DIMENSIONS

Radio with Standard Battery, no Antenna

- Height: 5.3 in (135 mm)
- Width: 2.2 in (55 mm)
- Depth: 1.3 in (33 mm)
- Weight: 13.1 oz (370 g)

Footnotes
1 Optional Feature



PERFORMANCE

TRANSMITTER

	Note	700 MHz	800 MHz
Frequency Range / Bandsplits	-	762-776, 792-806 MHz	806-825, 851-870 MHz
Channel Spacing	-	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz
Maximum Frequency Separation	-	Full Bandsplit	Full Bandsplit
Rated RF Output Power (Adjustable)	1	1-2.5 W	1-3 W
Frequency Stability (-30 °C to +60 °C; +25 °C Ref.)	1	±1.0 ppm	±1.0 ppm
Modulation Limiting (12.5 / 20 / 25 kHz Channel)	1	±2.5 / ±4 / ±5 kHz	±2.5 / ±4 / ±5 kHz
Emissions (Conducted and Radiated)	1	-75 dBc	-75 dBc
Audio Response	1	+1, -3 dB	+1, -3 dB
FM Hum and Noise (12.5 / 25 kHz Channel)	-	-45 / -47 dB	-45 / -47 dB
Audio Distortion (12.5 / 25 kHz Channel)	1	1.00%	1.00%

RECEIVER

	Note	700 MHz	800 MHz
Frequency Range / Bandsplits	-	762-776, 799-806 MHz	851-870 MHz
Channel Spacing	-	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz
Maximum Frequency Separation	-	Full Bandsplit	Full Bandsplit
Audio Output Power at Rated	1	0.5 W	0.5 W
Analog Sensitivity (12 dB SINAD)	2	0.25 µV	0.25 µV
Digital Sensitivity (1% BER)	3	0.4 µV	0.4 µV
Digital Sensitivity (5% BER)	3	0.25 µV	0.25 µV
Selectivity (12.5 / 25 kHz Channel)	1	-61.3 / -75.2 dB	-61.3 / -75.2 dB
Intermodulation Rejection	-	-75 dB	-75 dB
Spurious Rejection	-	-76.6 dB	-76.6 dB
FM Hum and Noise (12.5 / 25 kHz Channel)	-	-47 / -53 dB	-47 / -53 dB
Audio Distortion	1	1.00%	1.00%

IMPRES™ 2 BATTERIES

	Footnote	Part No	Capacity	Availability
Standard	-	PMNN4813	2850mAh	Included
HAZLOC	4	PMNN4815	3200mAh	Optional

ENCRYPTION

Supported Encryption Algorithms	AES 256-bit Software Encryption (AES-256), DES-OFB
Encryption Keys per Radio	1024 Keys, Programmable for 48 Common Key References (CKR) or 16 Physical Identifiers (PID)
Encryption Keying	Local Key Loader
Vector Generator	NIST-Approved Random Number Generator
Synchronization	OFB - Output Feedback
Encryption Type	Digital, TLS1.2, SRTP
Key Storage	Non-volatile Memory
Key Erasure	Keyboard Command Detection
Standards	FIPS 140-3 Level 1, FIPS 197
Device Certificates	x.509v3 ECC-P384 x.509v3 RSA-2048
Cipher Suites FIPS 140-2	TLS_RSA_WITH_AES_256_GCM_SHA384 SRTP_AEAD_AES_256_GCM1

LOCATION TRACKING

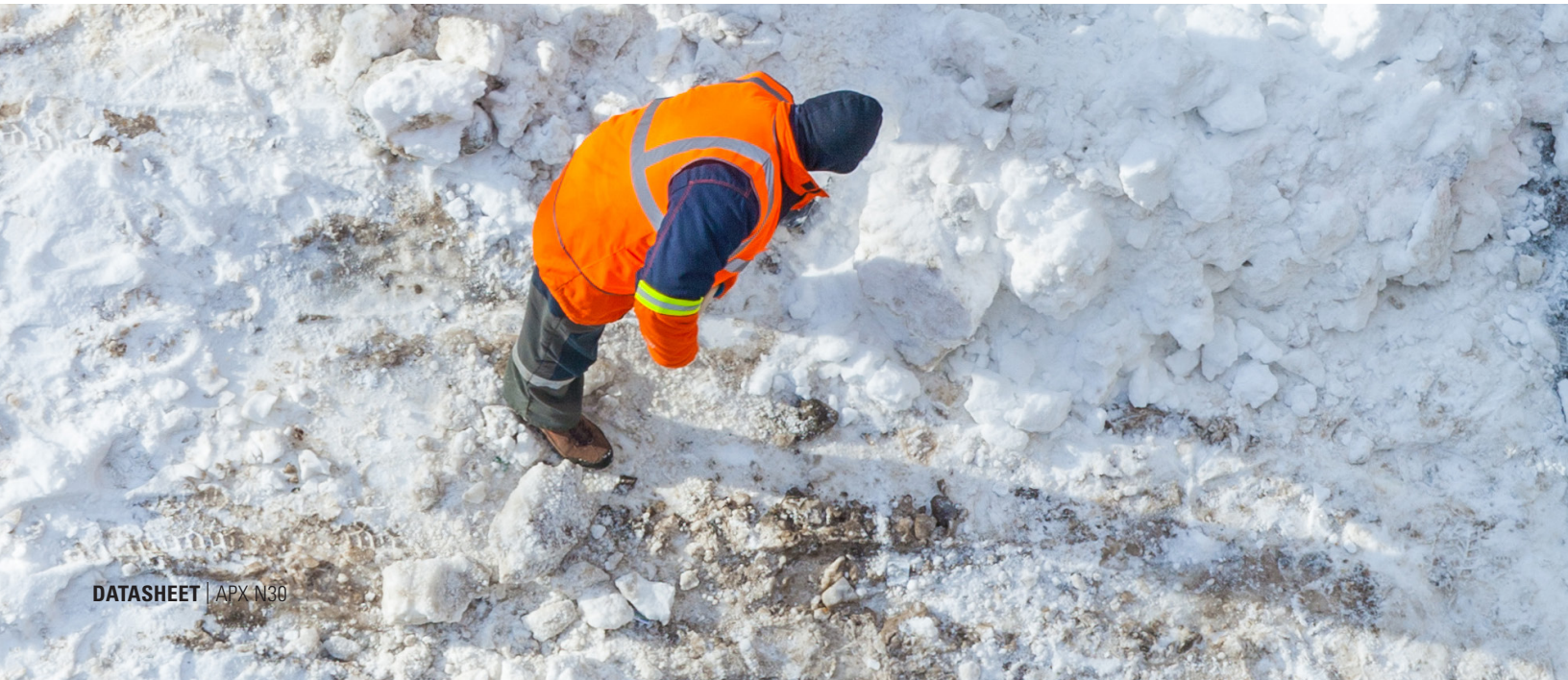
	Footnote	
Constellations	-	GPS and GLONASS
Tracking Sensitivity	-	-154 dBm
Accuracy	5	<10m (95%)
Cold Start	5	<60 Seconds (95%)
Hot Start	5	<5 Seconds (95%)
Mode	-	Autonomous (non-assisted) GPS

WIRELESS

WiFi		
Standards Supported	-	802.11a/ b/g/n/ac
Frequency Range	-	2400-2472, 5180-5825 MHz
Security	-	Supports WPA-2, WPA, WEP
Capacity	-	Up to 20 SSIDs
Bluetooth		
Version	-	4.2 (LE)
Frequency Range	-	2402 - 2480 MHz
Security	-	SSP Pairing 128-bit AES-CDM Encryption for voice, data and signaling

AUDIO

Audio Output Power at Rated	0.5 W
Audio Output Power at Max	2 W
Audio Response (EIA)	+1, -3 dB
Speech Loudness at 12 in (300 mm)	98 phon
Audio Features	Adaptive Equalization Adaptive Dual-sided Operation Adaptive Gain Control IMPRES Audio



ENVIRONMENTAL AND REGULATORY

MIL-STD 810

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G/H	
	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/ BasicHot	501.5	I/A1, II/A1
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temperature Shock	503.1	I	503.2	I/A1, C3	503.3	I/A1, C3	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I/A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	1 Proc	507.5	II/Aggravated
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	1 Proc	509.5	1 Proc
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Blowing Sand	1 Proc	1 Proc	510.2	II	510.3	II	510.4	II	510.5	II
Submersion	512.1	I	512.2	I	512.3	I	512.4	I	512.5	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	514.6	I/24
Shock	516.2	I, III, V	516.3	I, V, VI	516.4	I, V, VI	516.5	I, V, VI	516.6	I, V, VI
Shock (Drop)	516.2	II	516.3	IV	516.4	IV	516.5	IV	516.6	IV

ENVIRONMENTAL

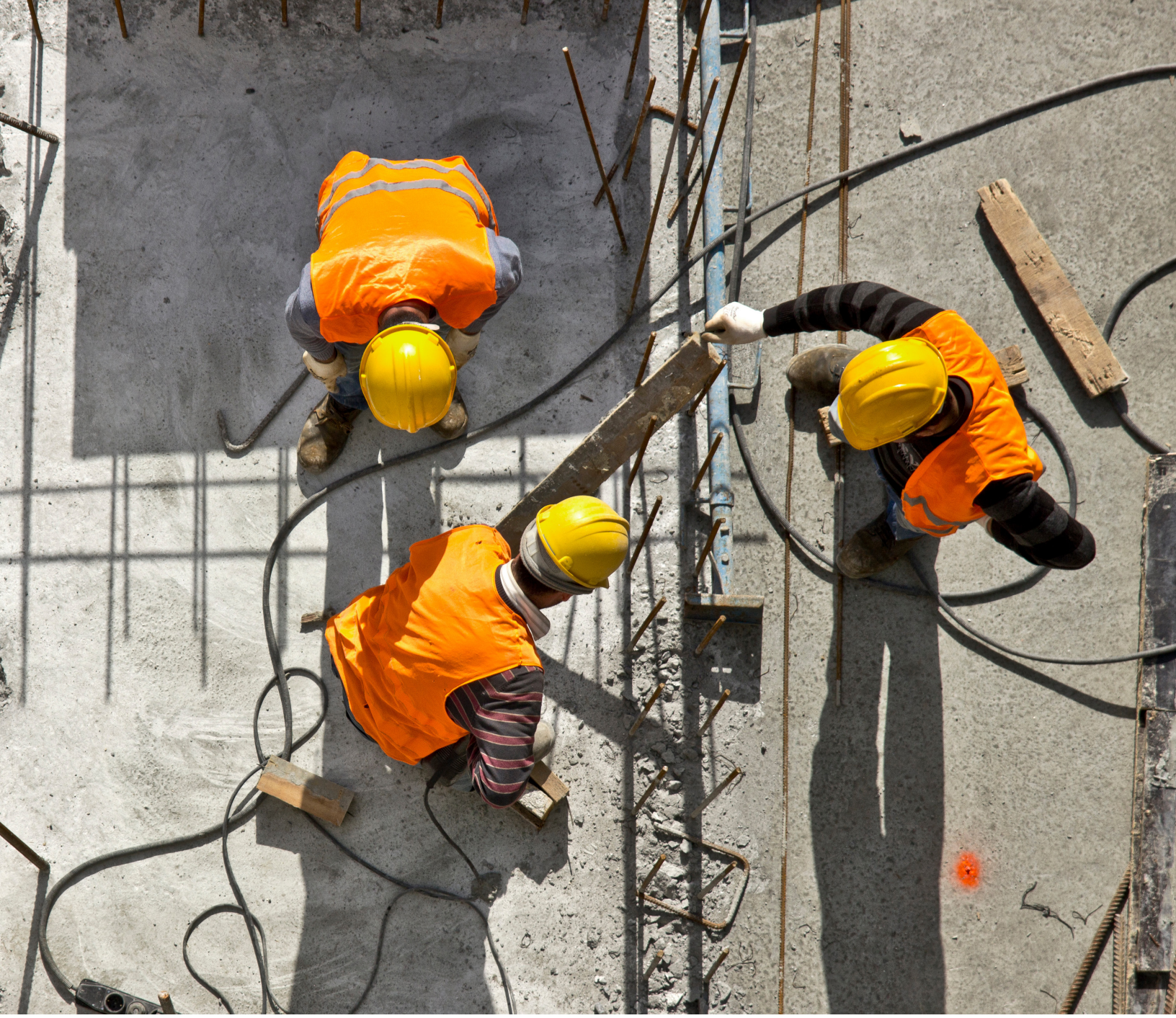
	Footnote	
Operating Temperature	6	-30 to +60 °C (-22 to +140 °F)
Storage Temperature	6	-40 to +85 °C (-40 to +185 °F)
Humidity	-	Per MIL-STD 810
ESD	-	IEC 801 - 2 kV
Dust Resistance	-	IP6X
Water Resistance (Submersion)	-	IPX8 (2 meters, 2 hours)

REGULATORY

FCC ID	AZ489FT7161
IC ID	109U-89FT7161
LMR	11K0F3E, 16K0F3E, 8K10F1D, 8K10F1E, 8K10F1W
Bluetooth	1M18G1D, 1M1F1D, 2M1F1D
WiFi	12M9G1D, 16M7D1D, 17M9D1D, 36M2D1D, 17M5D1D, 18M4D1D, 36M8D1D, 76M1D1D
Model Number	H15UCF9PW6AN

1. Measured in the analog mode per TIA / EIA 603 under nominal conditions. Selectivity reflects newer 2-tone test method as defined in revision D TIA603-D issued in 2010.
2 .Measured conductively in analog mode per TIA / EIA 603 under nominal conditions.
3 .Measured conductively in digital mode per TIA / EIA IS 102.CAAA under nominal conditions.
4. Listed by UL to the standards ANSI/TIA 4950-A and CAN/CSA C22.2 NO. 157-92 Classification Rating: Class I, Division 1, Groups C, D; Class II, Division 1, Group E, F, G; Class III, Hazardous (Classified) Locations. ANSI/ISA 12.12.01-2015 and CAN/CSA C22.2 No. 213-15; Class I, Division 2, Groups A, B, C, D; T3C
5. Measured conductively with >6 satellites visible at a nominal -130 dBm signal strength. Specs provided are 95th percentile values.
6.LMR only. Front display, Wi-Fi, Bluetooth and GPS not available when radio internal
temperature is below -20 °C (-4 °F). Batteries should be charged at 0 to +45 °C (+32 to +113 °F) and stored at +20 to +25 °C (+68 to +77 °F) . Reference motorolasolutions.com/batterycare

All specifications are subject to change without notice.



For more information on APX N30, please visit: **motorolasolutions.com/APXN30**

MOTOROLA SOLUTIONS