

SONY

UHF Wireless Microphone Package

UWP-D Series

(UWP-D11, UWP-D12, UWP-D16)



High Quality Sound with Digital Audio Processing

Innovation in Sound -- Introducing the new UWP-D Series wireless microphone system, which realizes high-quality sound and stable wireless transmission utilizing Sony's true diversity reception system. Since its introduction in 2003, the UWP Series has been widely used in a broad range of applications, not only for ENG (electronic news gathering) and EFP (electronic field production), but also for live concerts, sporting events, documentaries, and weddings.

High-quality Sound

Sony's Digital Audio Processing technology improves transient response performance, and realizes high-quality sound.

Superior Operability

Performs channel settings via Automatic Channel Setting mode.

Low Profile and Lightweight

The small body size and lightweight design are ideal for use in small camcorders or interchangeable-lens digital cameras.



UWP-D11



UWP-D12

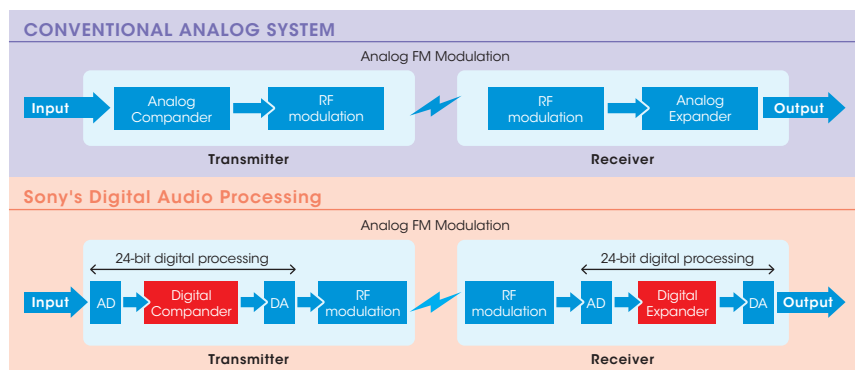


UWP-D16

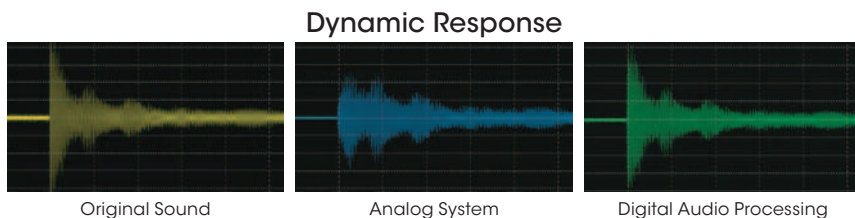
Sony's Digital Audio Processing

Sound quality is the most important issue in wireless transmission. Conventional analog systems make use of companders to provide the required dynamic range. However, while compander systems have improved over time, their inherent problems with sound quality and transient response performance have yet to be completely solved.

Sony's newly developed Digital Audio Processing, which uses DSP (digital signal processing) for digital companding, realizes high sound quality.

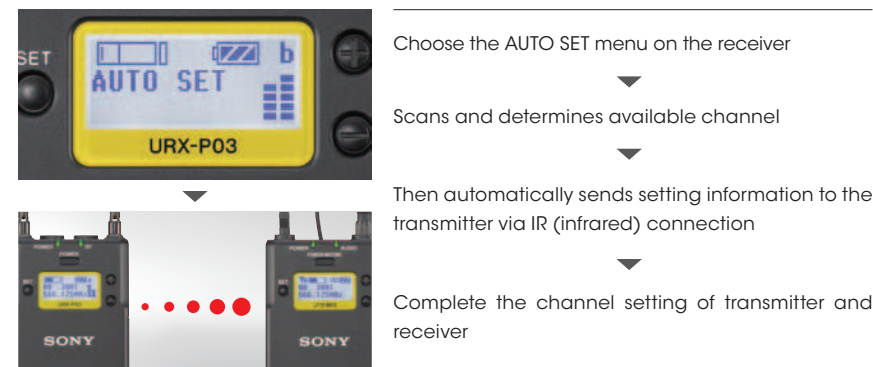


DSP optimizes the audio signal processing applied between the transmitter and receiver. It provides superb transient response performance. While analog companding systems cannot reproduce sounds such as a bell or tee shot with precision, Sony's Digital Audio Processing can reproduce them very accurately.



DSP also can correct characteristics of frequency response in the transmission process for precise reproduction of original sounds.

Easy-to-use Automatic Channel Setting Mode



Clear Channel Scan & Active Channel Scan

The Clear Channel Scan function searches for a channel that is not being used by another wireless device or by a TV station. This makes it easy to find an available channel so the wireless microphone can be used without interference. The Active Channel Scan function detects Sony's wireless transmitter from the channel lists within a selected group.

IR Sync

The receiver can transfer the desired frequency to the transmitter via IR connection, and allows for quick and simple setup.

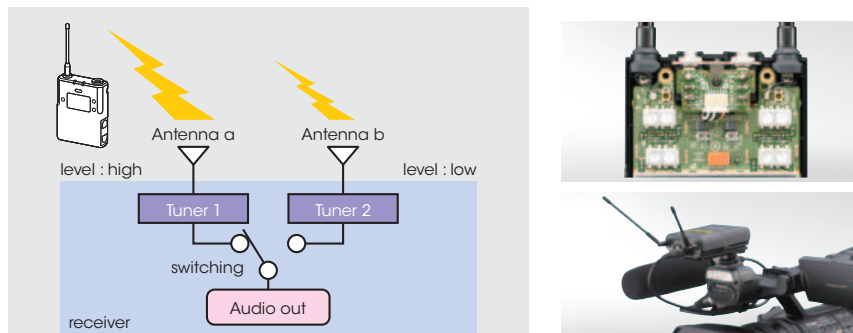
Wide Frequency Coverage

The system's operating bandwidth (up to 72 MHz*) achieves great mobility to cover a wide area and provide more channel options.

*1 Depends on the country or frequency version.

True Diversity Reception System for Stable Reception

Typically, wireless microphone transmission systems are subject to interruptions in reception (RF signal dropout), but the UWP-D Series reduces this to a minimum. Utilizing a true diversity reception system, it achieves highly stable reception because of its two receiving antennas, each with RF circuits. RF signals from the two antennas are compared and the stronger signal is automatically selected for output. The angle of the antennas on the portable receiver can also be adjusted, which helps to further eliminate signal dropout.



Compatibility with UWP Series / WL-800 Series

DSP enables a digital compander to match Sony's analog wireless system. The UWP-D transmitter can be used with a UWP Series or WL-800 Series receiver, and a UWP Series or WL-800 Series transmitter can be used with a UWP-D receiver.



Headphone Output for Monitoring

Sound can be monitored directly from the receiver. This is especially convenient when using a camera that does not have a headphone output.

Smart Battery Operation

USB for Power Supply or Charging Batteries

A DC power drive can be utilized for long-term use or as an emergency power supply*1. Rechargeable battery operation is also available with Ni-MH batteries*2.

*1 Excludes the UTX-M03. *2 Not supplied.

Cartridge-type Battery Case*3

The supplied battery cartridge is compatible with Sony's DWZ Series, and allows for quick and easy battery exchange.

*3 For the UTX-B03, UTX-P03, and URX-P03 only.



Output Level Control

This receiver function enables control of the receiver output sound level: ± 12 dB. This is useful because some video cameras don't offer manual input level control.

Line Input Available for Body Pack Transmitter

Switchable MIC or LINE input level and adjustable attenuators allow the user to select proper audio input levels.

MI Shoe Adapter

The wireless receiver of UWP-D series can be attached to camcorders or interchangeable-lens cameras that have an MI (Multi-Interface) Shoe using the MI shoe adapter, eliminating the need for connecting cables. By using the MI shoe adapter, the audio signal can be sent directly from a wireless receiver to a camera. In addition, the wireless receiver can get power from the camera, and the camera's power switch interlocks the wireless receiver's power switch to unify the power management. (Please refer to www.sony.com/proaudio for camera compatibility.)

Interchangeable Microphone Capsules

The supplied high-quality dynamic cardioid microphone capsule can be used with the handheld microphone. Alternatively, any of Sony's DWX Series capsules such as the CU-C31, F31, or F32 can also be used (the thread pitch is 1.25"/28 (31.3 mm/pitch 1.0 mm threading))*1.



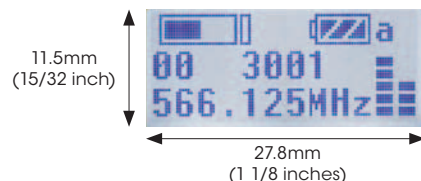
*1 Use of third-party capsules may cause RFI or EMF noise.

+48 V Power Supply for Plug-on Transmitter

This function enables direct connection of condenser microphones requiring DC 48 V powering.

Large Display and Advanced Selectable Menu

An easy-to-read large LCD and sophisticated yet easy-to-operate menu allows for secure and speedy settings.



Compact, Lightweight, and Robust Design

All components of the UWP-D Series – the body pack transmitter, handheld microphone, plug-on transmitter, and portable receiver – utilize an extremely robust metal chassis that is ideal for heavy-duty wireless operation. The metal body also allows for an extremely compact and lightweight design, providing the high level of mobility required for ENG and EFP operations.



Sony's UWP-D Series is ideal for compact video cameras and interchangeable-lens digital cameras

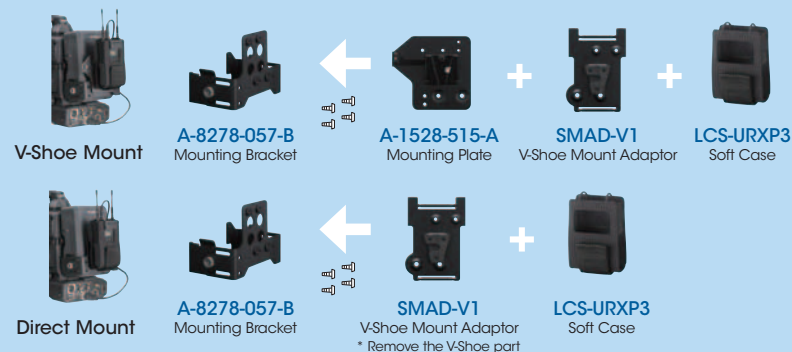


How to Attach the Soft Case (LCS-URXP3)






































For Handheld Camcorders



For Shoulder Camcorders



Package Lineup

								Frequencies as follows				
UWP-D11 	 UTX-B03 : Bodypack Transmitter	 URX-P03 : Portable Receiver	 Omni-directional Lavalier Microphone	 Microphone Holder Clip	 Stereo Mini-BMP Cable	 Stereo Mini-BMP Cable	 Belt Clip	 Shoe Mount Adapter	 Wire	 Soft Case		
UWP-D12 	 UTX-M03 : Handheld Wireless Microphone	 URX-P03 : Portable Receiver	 Microphone Holder	 Microphone Holder Clip	 Stereo Mini-BMP Cable	 Stereo Mini-BMP Cable	 Belt Clip	 Shoe Mount Adapter	 Wire	 Soft Case		
UWP-D16 	 UTX-P03 : Plug-on Transmitter	 UTX-B03 : Bodypack Transmitter	 URX-P03 : Portable Receiver	 Omni-directional Lavalier Microphone	 Microphone Holder Clip	 Stereo Mini-BMP Cable	 Stereo Mini-BMP Cable	 Belt Clip	 Shoe Mount Adapter	 Wire	 Soft Case	

Frequencies

	Operating frequencies	470 MHz to 542 MHz	566 MHz to 630 MHz	566 MHz to 638 MHz	638 MHz to 694 MHz	638 MHz to 698 MHz	710 MHz to 782 MHz	794 MHz to 806 MHz	806 MHz to 810 MHz	925 MHz to 937 MHz
UC	version	UC14		UC30 ^{*1}		UC42				
	Selectable frequencies	564 (in 125-kHz steps) 2772 (in 25-kHz steps)		517 (in 125-kHz steps) 2541 (in 25-kHz steps)		470 (in 125-kHz steps) 2310 (in 25-kHz steps)				
CE	version	CE21	CE33		CE42		CE51			
	Selectable frequencies	567 (in 125-kHz steps) 2880 (in 25-kHz steps)	504 (in 125-kHz steps) 2560 (in 25-kHz steps)		441 (in 125-kHz steps) 2240 (in 25-kHz steps)		567 (in 125-kHz steps) 2880 (in 25-kHz steps)			
CN	version						CN38			
	Selectable frequencies						567 (in 125-kHz steps) 2880 (in 25-kHz steps)			
E	version							E		
	Selectable frequencies							94 (in 125-kHz steps)		
J	version								JB	
	Selectable frequencies								30 (in 125-kHz steps)	
KR3	version									KR3
	Selectable frequencies									99 (in 125-kHz steps)

*1 566 MHz to 608 MHz and 614 MHz to 638 MHz

Products



UTX-B03 Bodypack Transmitter

- Sony's Digital Audio Processing
- Compatibility with UWP Series / WL-800 Series
- Extremely compact, lightweight, and robust metal body
- USB for power supply or charging batteries
- Switchable MIC/LINE input level and adjustable attenuator (0 dB to 21 dB, 3-dB steps)
- Supplied with omni-directional lavalier microphone



UTX-M03 Handheld Wireless Microphone

- Sony's Digital Audio Processing
- Incorporates an all-metal, robust, uni-directional dynamic microphone capsule with minimized popping and wind noise
- Compatibility with UWP Series / WL-800 Series
- USB for charging batteries
- Interchangeable microphone capsule



UTX-P03 Plug-on Transmitter

- Sony's Digital Audio Processing
- Converts a wired microphone to a wireless microphone via an XLR-type connector
- Compatibility with UWP Series / WL-800 Series
- USB for power supply or charging batteries
- Extremely compact, lightweight, and robust metal body
- +48 V power supply



URX-P03 Portable Receiver

- Sony's Digital Audio Processing
- Easy-to-use Automatic Channel Setting mode
- Space Diversity Reception System for stable reception
- Compatibility with UWP Series / WL-800 Series
- Headphone output for monitoring
- Extremely compact, lightweight, and robust metal body
- USB for power supply or charging batteries
- Output level control

Accessories



ECM-V1BMP
Omni-directional Lavalier Microphone



AD-RV1B2
Windscreen Pack (5PCS)



SAD-HV1B2
Holder Clip Pack (4PCS)



BATC-3AA
Battery Case



SMAD-P2
Shoe Mount Adaptor



BLC-BP2
Belt Clip (2PCS)



SAD-M01
Microphone Holder



EC-0.46BX
3-pole Locking Mini Plug-XLR(M) Cable



EC-0.8BM
3-pole Locking Mini Plug-Stereo Mini Plug Cable



EC-1.5BX
3-pole Locking Mini Plug-XLR(F) Cable



LCS-URXP3
Soft Case



SMAD-V1
V-Shoe Mount Adaptor



ECM-X7BMP
Lavalier Microphone



ECM-77BMP
Omni-directional Lavalier Microphone



ECM-44BMP
Omni-directional Lavalier Microphone



ECM-166BMP
Uni-directional Lavalier Microphone



ECM-FT5BMP
Omni-directional Lavalier Microphone



ECM-LZ1UBMP
Uni-directional Lavalier Microphone



ECM-322BMP
Omni-directional Headset Microphone

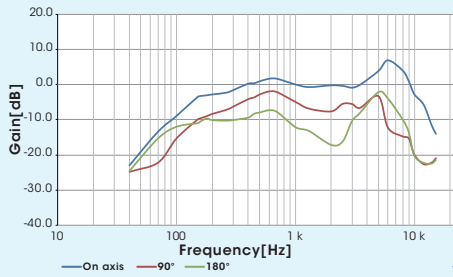


ECM-HZ1UBMP
Uni-directional Headset Microphone

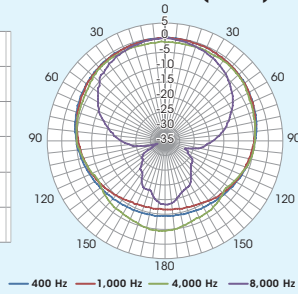
SPECIFICATIONS

UTX-M03

Frequency Response Characteristics

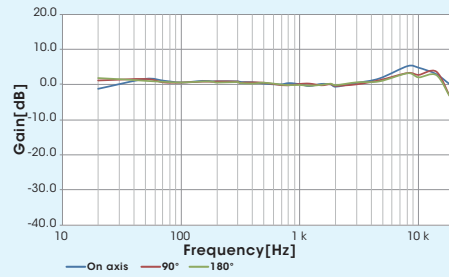


Directivity Characteristics (1 kHz)

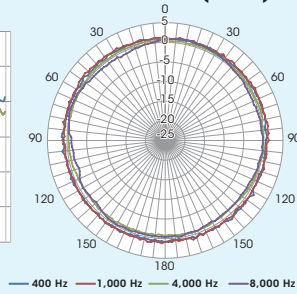


ECM-V1BMP

Frequency Response Characteristics



Directivity Characteristics (1 kHz)



Model Code	ECM-V1BMP
Frequency Response	40 Hz to 20 kHz
Directivity	Omnidirectional
Capsule Type	Condenser
Sensitivity	-43.0 dB ±3.0 dB (1 kHz/Pa)
Dynamic Range	86 dB or more
Maximum Input Sound Pressure Level	120 dB SPL
Microphone Head	φ 9/32 X 25/32 inches (6.8 x 19.5 mm) (diameter/length)
Mic Cable	3.9 feet (1.2 m)
Power Requirements	DC 5 V
Supplied Accessories	Windscreen (1) Horizontal Clip (1)

	UTX-B03 Bodypack transmitter	UTX-M03 Handheld wireless microphone	UTX-P03 Plug-on transmitter	
Oscillator Type	Crystal-controlled PLL Synthesizer	Crystal-controlled PLL Synthesizer	Crystal-controlled PLL Synthesizer	
Antenna Type	1/4 wave length wire	1/4 wave length wire (internal)	Integral type	
Type of Emission	F3E			
Carrier Frequencies	UC	UC14 : 470.125 MHz to 541.875 MHz UC30 : 566.125 MHz to 607.875 MHz and 614.125 MHz to 637.875 MHz UC42 : 638.125 MHz to 697.875 MHz	UC14 : 470.125 MHz to 541.875 MHz UC30 : 566.125 MHz to 607.875 MHz and 614.125 MHz to 637.875 MHz UC42 : 638.125 MHz to 697.875 MHz	UC14 : 470.125 MHz to 541.875 MHz UC30 : 566.125 MHz to 607.875 MHz and 614.125 MHz to 637.875 MHz UC42 : 638.125 MHz to 697.875 MHz
	CE7	CE21 : 470.025 MHz to 542.000 MHz CE33 : 566.025 MHz to 630.000 MHz CE42 : 638.025 MHz to 694.000 MHz CE51 : 710.025 MHz to 782.000 MHz	CE21 : 470.025 MHz to 542.000 MHz CE33 : 566.025 MHz to 630.000 MHz CE42 : 638.025 MHz to 694.000 MHz CE51 : 710.025 MHz to 782.000 MHz	CE21 : 470.025 MHz to 542.000 MHz CE33 : 566.025 MHz to 630.000 MHz CE42 : 638.025 MHz to 694.000 MHz CE51 : 710.025 MHz to 782.000 MHz
	CN	CN38 : 710.025 MHz to 782.000 MHz	CN38 : 710.025 MHz to 782.000 MHz	CN38 : 710.025 MHz to 782.000 MHz
	E	E : 794.125 MHz to 805.875 MHz	E : 794.125 MHz to 805.875 MHz	E : 794.125 MHz to 805.875 MHz
	J	JB : 806.125 MHz to 809.750 MHz	JB : 806.125 MHz to 809.750 MHz	JB : 806.125 MHz to 809.750 MHz
	KR3	KR3 : 925.125 MHz to 937.500 MHz	KR3 : 925.125 MHz to 937.500 MHz	KR3 : 925.125 MHz to 937.500 MHz
	RF Power	30 mW / 5 mW	30 mW / 5 mW	40 mW / 5 mW 30 mW / 5 mW
Capsule Type	Electret condenser	Dynamic	-	
Directivity	Omni-directional	Uni-directional	-	
Input Connector	3-pole locking mini jack	-	XLR-3-11C (female)	
Phantom Power Voltage	-	+48 V	+48 V	
Reference Input Level	MIC: -60 dBV (at 0-dB attenuator level) / LINE: +4 dBu	MIC: -60 dBV (at 0-dB attenuator level) / LINE: +4 dBu	MIC: -60 dBV (at 0-dB attenuator level) / LINE: +4 dBu	
Maximum Input Level	-	151 dB SPL (at 21-dB attenuator level)	-	
Audio Attenuator Adjustment Range	0 dB to 21 dB (in 3-dB steps): Mic input	0 dB to 21 dB (in 3-dB steps)	0 dB to 21 dB (in 3-dB steps): Mic input	
Frequency Response	UC/CE7/CN/KR3/E	Transmission: 23 Hz to 18 kHz (typical) Capsule Unit: 70 Hz to 18 kHz	Transmission: 23 Hz to 18 kHz (typical) Capsule Unit: 70 Hz to 18 kHz	
	J	Transmission: 40 Hz to 15 kHz (typical)	Transmission: 23 Hz to 15 kHz (typical) Capsule Unit: 70 Hz to 18 kHz	
Signal-to-Noise Ratio	-	96 dB (max deviation, A-weighted)	-	
Audio Delay	-	Approx. 0.35 msec	-	
Pilot Tone Signal	-	32 kHz / 32.382 kHz / 32.768 kHz	-	
Display	-	LCD	-	
Power Requirements	DC 3.0 V (with two AA-size alkaline (LR6) batteries) DC 5.0 V (via USB micro-B)			
Battery Operating Time	UC/CE7/CN: Approx. eight hours with Sony's AA-size alkaline (LR6) batteries at 25°C (77°F) at 30-mW output E/KR3/J: Approx. 10 hours with Sony's AA-size alkaline (LR6) batteries at 25°C (77°F) at 30-mW output		UC: Approx. six hours with Sony's AA-size alkaline (LR6) batteries at 25°C (77°F) at 50-mW output CE7: Approx. eight hours with Sony's AA-size alkaline (LR6) batteries at 25°C (77°F) at 30-mW output E/KR3: Approx. 10 hours with Sony's AA-size alkaline (LR6) batteries at 25°C (77°F) at 10-mW output	
Operating Temperature	32°F to 122°F (0°C to 50°C)			
Storage/Transport Temperature	-4°F to +131°F (-20°C to +55°C)			
Dimensions	2 1/2 x 3 1/4 x 13/16 inches (63 x 82 x 20 mm) (excluding the antennas) (W x H x D)	φ 1 5/16 x 10 1/4 inches (48 x 260 mm) (diameter / length)	1 11/16 x 1 11/16 x 4 1/8 inches (42 x 42 x 102 mm) (W x H x D)	
Weight	Approx. 5.3 oz (149 g) (including batteries)		Approx. 10 oz (296 g) (including batteries)	

	URX-P03 Portable receiver	
Oscillator Type	Crystal-controlled PLL Synthesizer	
Reception Type	True diversity	
Antenna Type	1/4 wave length wire	
Carrier Frequencies	UC	UC14 : 470.125 MHz to 541.875 MHz UC30 : 566.125 MHz to 607.875 MHz and 614.125 MHz to 637.875 MHz UC42 : 638.125 MHz to 697.875 MHz
	CE7	CE21 : 470.025 MHz to 542.000 MHz CE33 : 566.025 MHz to 630.000 MHz CE42 : 638.025 MHz to 694.000 MHz CE51 : 710.025 MHz to 782.000 MHz
	CN	CN38 : 710.025 MHz to 782.000 MHz
	E	E : 794.125 MHz to 805.875 MHz
	J	JB : 806.125 MHz to 809.750 MHz
	KR3	KR3 : 925.125 MHz to 937.500 MHz
	Frequency Response	23 Hz to 18 kHz (typical)
Signal-to-Noise Ratio	96 dB (max deviation, A-weighted)	
Distortion (I.H.D)	0.9% or less (-60 dBV, 1 kHz input)	
Audio Delay	Approx. 0.35 msec	
Analog Output	3-pole mini jack, unbalanced	
Analog Output Level	-60 dBV (at ±5 kHz deviation)	
Analog Output Adjust Range	-12 dB to +12 dB (3-dB step)	
Headphone Output	φ3.5 mm (5/32 inch) stereo mini jack	
Headphone Output Level	5 mW (at 16-ohm load)	
Pilot Tone Signal	32 kHz / 32.382 kHz / 32.768 kHz	
Display	LCD	
Power Requirements	DC 3.0 V (with two AA-size alkaline (LR6) batteries) DC 5.0 V (via USB micro-B)	
Battery Operating Time	Approx. six hours with Sony's AA-size alkaline (LR6) batteries at 25°C (77°F)	
Operating Temperature	32°F to 122°F (0°C to 50°C)	
Storage/Transport Temperature	-4°F to +131°F (-20°C to +55°C)	
Dimensions	2 1/2 x 3 1/4 x 15/16 inches (63 x 82 x 23.8 mm) (excluding the antennas) (W x H x D)	
Weight	Approx. 6.2 oz (176 g) (including batteries)	