

# FREQUENCY-AGILE TRUE DIVERSITY UHF WIRELESS SYSTEMS

ATW-3110a UniPak™ Transmitter System  
ATW-3141a Handheld Transmitter System

IMPROVED  
PERFORMANCE  
NOW FEATURING  
AUTOMATIC  
FREQUENCY SCANNING

## 3000 SERIES



ATW-R3100



ATW-T310



ATW-T341

### SYSTEM FEATURES

- Automatic Frequency Scanning
- 200 Selectable UHF Channels
- True Diversity Operation
- Advanced Digital Tone Lock™ Squelch
- LCD Information Display
- Balanced XLR and Unbalanced 1/4" Outputs
- Step-through Menus for Setting Preferences
- Transmitter Battery-life Fuel Gauge on Receiver
- ATW-T310 UniPak™ Transmitter Features Dual-impedance Input
- ATW-T341 Handheld Microphone/Transmitter features the Artist Elite® AE4100 Capsule
- Up to 16 Simultaneous Systems per Frequency Band for a Total Maximum of 32 Simultaneous Systems Across Two Bands

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# 3000 SERIES

## Specifications†

### Overall System

UHF Operating Frequency	Band C: 541.500 to 566.375 MHz; Band D: 655.500 to 680.375 MHz
Number of Channels	200 total, per band
Frequency Stability	±0.005%, Phase Lock Loop frequency control
Modulation Mode	FM
Normal Deviation	±10 kHz
Operating Range	300' typical
Operating Temperature Range	41° F (5° C) to 113° F (45° C)
Frequency Response	70 Hz to 15 kHz

### ATW-R3100 Receiver

Receiving System	Dual independent receivers, automatic-switching diversity
Image Rejection	60 dB nominal, 55 dB minimum
Signal-to-noise Ratio	110 dB at 35 kHz deviation (IEC-weighted), maximum modulation 75 kHz
Total Harmonic Distortion	≤1% (10 kHz deviation at 1 kHz)
Sensitivity	24 dBµV (S/N 60 dB at 5 kHz deviation, IEC-weighted)
Intermediate Frequency	243.950 MHz, 10.7 MHz
Audio Output	
Unbalanced:	50 mV (at 1kHz, ±5 kHz deviation, 10k ohm load)
Balanced:	32 mV (at 1kHz, ±5 kHz deviation, 10k ohm load)
Output Connectors	
Unbalanced:	1/4" TS ("mono") phone jack
Balanced:	XLRM-type
Power Supply	120V AC 60 Hz, or 12-18V DC, 500 mA, center positive, with external supply
Dimensions	8.27" (210.0 mm) W x 1.93" (49.0 mm) H x 7.20" (183.0 mm) D

## Optional System Accessories

### Wireless Essentials™ Microphones and Cables

All Wireless Essentials accessories are terminated for use with all A-T UniPak™ transmitters.

AT829cW	Miniature cardioid condenser lavalier microphone. Includes clothing clip and windscreen.
MT830cW	Miniature omnidirectional condenser lavalier microphone. Includes clothing clip and windscreen.
MT830cW-TH	"Theater" model, same as MT830cW except beige color mic and cable for concealment.
AT831cW	Miniature cardioid condenser lavalier microphone. Includes clothing clip and windscreen.
AT889cW	Headworn noise-canceling condenser microphone. Includes windscreen and cable clip.
AT892cW	MicroSet™ headworn omnidirectional condenser microphone. Includes element covers, windscreens, moisture guard and clothing clip.
AT892cW-TH	"Theater" model, same as AT892cW except beige color mic, earset and cable for concealment.
AT898cW	Subminiature cardioid condenser lavalier microphone. Includes clothing clip base, viper clip base, magnet clip base, three single mic holders, two double mic holders, two windscreens.

Weight	2.4 lbs (1.1 kg)
Accessories Included	AD1205AA 120V 60 Hz in-line AC adapter; two flexible UHF antennas; rack-mount adapters

### ATW-T310 UniPak™ Transmitter

RF Power Output	High: 30 mW; Low: 10 mW, nominal
Spurious Emissions	Under federal regulations
Dynamic Range	≥110 dB, A-weighted
Input Connections	High impedance, low impedance, bias
Batteries (not included)	Two 1.5V AA alkaline
Current Consumption	High: 200 mA; Low: 150 mA, typical
Battery Life	Approximately 6 hours (High); 8 hours (Low), depending on battery type and use pattern
Dimensions	2.60" (66.0 mm) W x 3.43" (87.0 mm) H x 0.94" (24.0 mm) D
Net Weight (without batteries)	2.8 oz (80 grams)

### ATW-T341 Handheld Transmitter

RF Power Output	High: 30 mW; Low: 10 mW, nominal
Spurious Emissions	Under federal regulations
Dynamic Range	≥110 dB, A-weighted
Microphone Element	Dynamic cardioid (unidirectional)
Batteries (not included)	Two 1.5V AA alkaline
Current Consumption	High: 230 mA; Low: 180 mA, typical
Battery Life	Approximately 6 hours (High); 8 hours (Low), depending on battery type and use pattern
Dimensions	9.33" (237.0 mm) long, 1.89" (48.0 mm) dia.
Net Weight (without batteries)	9.9 oz (280 grams)
Accessory Included	AT8456a Quiet-Flex™ stand clamp

† In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

Specifications are subject to change without notice.

AT899cW	Subminiature omnidirectional condenser lavalier microphone. Includes AT899AK accessory kit.
AT899cW-TH	"Theater" model, same as AT899cW except beige color mic and cable for concealment. Includes AT899AK-TH accessory kit.
ATM35cW	Cardioid condenser instrument microphone. Includes AT841B clip-on instrument mount.
ATM73cW	Headworn cardioid condenser microphone. Includes windscreen.
ATM75cW	Headworn cardioid condenser microphone. Includes windscreen.
PRO 8HEcW	Headworn hypercardioid dynamic microphone. Includes windscreen and cable clip.
PRO 35xcW	Cardioid condenser instrument microphone. Includes AT841B clip-on instrument mount.
AT-GCW	Hi-Z instrument/guitar cable with 1/4" phone plug.
XLRW	Connecting cable for UniPak transmitter with an XLRF-type input connector; for Lo-Z microphones with XLRM-type output terminations.

### Other

AEW-DA550C	UHF active unity-gain antenna distribution system (540-565 MHz).
AEW-DA660D	UHF active unity-gain antenna distribution system (655-680 MHz).
ATW-A49	Pair of UHF wide-band (400-900 MHz) directional LPDA antennas.
AT8630	Joining-plate kit mounts two ATW-R310 receivers in one rack space.

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