

ATW-A54P & ATW-A64P

wireless microphones & system accessories

UHF Powered Dipole Antennas



- **Enhanced signal pickup for diversity UHF wireless systems where longer antenna runs are needed**
- **Internal gain-setting switch permits selection of +10 or +4 dB operation**
- **Screw terminal connections in the antennas are designed for use with RG58-type or RG8-type RF transmission cables**

Description

The ATW-A54P and ATW-A64P powered dipole antennas provide effective and reliable signal pickup for UHF wireless systems. Supplied in pairs, these antennas are intended to improve performance of diversity wireless receiving systems with dual antenna inputs. They are especially suited for applications where there are long RF cable runs between the antennas and receiver locations. Each antenna set is tuned for a particular UHF frequency band.

ATW-A54P: 541-567 MHz (TV Channels 25-30)

ATW-A64P: 655-681 MHz (TV Channels 44-49)

Engineered for temporary or permanent installations, these antennas contain an integral RF amplifier powered by 12V DC provided on the antenna cable by the associated wireless receiver or antenna distribution system. Power is required for their operation; an indicator on each housing illuminates when power is applied. An internal gain setting switch permits selection of +10 or +4 dB operation, to compensate for cable losses or other operating conditions.

Intended for indoor use, both models permit several means of mounting, including brackets with standard $\frac{5}{8}$ "-27 threads for use with conventional microphone stands or internal brackets which enable them to be attached directly to walls or other vertical surfaces or mounted to standard single-gang electrical boxes. For portable applications, BNC-type connectors are provided on the mounting brackets. The RF cable connects internally to screw terminals inside the antenna. The RF cables can be totally hidden by exiting behind the antenna housings, or they may exit through an opening at the bottom of each housing to be routed along the wall or mounting structure.

Constructed of high-impact materials, and painted a neutral beige color, the antennas are designed to blend in with their surroundings.

Architect's and Engineer's Specifications

The powered dipole antenna set shall consist of two UHF band specific antennas and appropriate mounting hardware for permanent or portable applications. Each antenna shall incorporate a compact dipole tuned to a specific UHF frequency band as determined by the associated wireless systems and an internal RF amplifier designed to drive long cable runs

between the antenna and receiver. Amplifier gain shall be selectable at 0 dB, +4 dB, +10 dB via an internal switch. The antenna shall operate on 12V DC power supplied via the RF cable from an associated wireless receiver or antenna distribution system. Each antenna shall draw no more than 14 mA of current and an indicator light shall be provided on the antenna to show power is present. RF output connections shall be via internal screw terminals and it shall be possible to exit the antenna cable out either the rear or bottom of the antenna housing. A BNC-type connector and short cable shall be included with each antenna. The antennas shall include mounting brackets with standard $\frac{5}{8}$ "-27 threaded mounts for attachment to conventional microphone stands along with hardware for attaching the antennas to walls or standard single gang electrical boxes. Each antenna shall be constructed from high-impact materials with metal mounts and finished in a neutral beige color.

The Audio-Technica ATW-A54P for systems operating in the 541-567 MHz band [ATW-A64P for systems operating in the 655-681 MHz band] is specified.

Specifications

Antenna type	Half-wavelength dipole with RF amplifier
Operating frequencies	ATW-A54P 541-567 MHz; ATW-A64P 655-681 MHz
Output impedance	50 ohms
Nominal amplifier gain	+10 dB (Hi), +4 dB (Lo), switch selected
Power required	+12V DC on RF cable center conductor, 14 mA per antenna
Dimensions	62 mm (2.44") W x 140 mm (5.51") H x 150 mm (5.91") D (when mounted vertically)
Weight	9.7 oz (275 g) each
Accessories included	2 AT8667 mounting brackets; shrink tub- ing (for use with RG8-type cable); 4 each of wood screws, 3.0 mm and 3.5 mm machine screws

* Within specified bandwidth

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.



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