



AiR Series ATSC On-Channel Repeater (DOCR) Available in a range of standard power levels up to 100 Watts



AiR Series featuring:

- Power outputs up to 100 Watts standard; higher powers available on request
- Most cost effective equipment to fill coverage gaps in main station pattern
- Low signal delay characteristic; less than 6 μ S!
- Compact size
- Weather proof enclosures available
- Superior, built-in echo canceling circuitry
- Powered by AC mains or DC
- Simple control interface

The AiR series of ATSC UHF on-channel repeaters provide the ideal solution for broadcasters to fill in areas of their Authorized Digital Service Area that are not sufficiently covered by their main transmitter, in accordance with recently adopted FCC DTV rules.

These on-channel repeaters are available in standard power outputs up to 100 Watts (contact factory for higher power levels). Digital non-linear correction for output amplifiers is provided. Digital linear correction enhances signal quality by compensating for output filter and input signal linear distortions. Overall delay of the signal from input to output is less than 6 μ S, well within the echo correction capability of the equalizers found in typical ATSC receiving devices. In addition, the repeaters are capable of internal echo cancellation that will allow for a clean output signal even in cases of less than optimum signal isolation between the input and output antennas.

Either AC or DC power may be used to operate the AiR series of repeaters. DC capability allows for true “green” operation, perfect for hard-to-access sites where AC mains are not available. Ai can also provide weather proof / environmentally stabilized enclosures to allow placement of the repeaters in difficult locations. Monitoring and control of various repeater parameters are easily accomplished through a secure web browser / SNMP interface.

AiR Digital on-channel Repeater Specifications

RF Specifications

System:	ATSC
Power output:	Up to 100 Watts average DTV, higher powers available on request
Frequency range:	U.S. UHF television channels
Frequency difference:	0 Hz, input to output
Out of Band products:	Fully compatible with FCC mask, simple or stringent
SNR:	Better than 30dB
System delay:	Less than 6 μ S
Echo cancellation:	Fully adaptive with both multipath and feedback echo capability
Input connector:	Type N, 50 Ohms
Output connector:	Type N, 50 Ohms

Physical/Environmental/Electrical

Size:	19" rack mount, height dependent on output power
Operating temperature:	-10 to +45 degrees Celsius
Humidity:	90%, non-condensing
Altitude:	3000m AMSL
Mains:	100 to 260 VAC or DC (contact factory for specific requirements)

Note: This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

Specifications are subject to change without notice.

