

01-19-01 Tim Purvis Changes to the AR3530:

The engineering changes to the AR3530 consist of the following:

- 1. Removal of one amplifier board on the forward link only
- 2. Removal of two hybrid combiners that split the input to the original two amps and recombined the output of the original two amps
- 3. Removal of associated coaxial cables
- 4. The addition of an external heat sink on the original casting
- 5. The uplink remains unchanged, it is identical to the original configuration
- 6. All other parts and functionality remain the same
- 7. The forward link power is reduced by 1dB output from +39dBm to +38dBm.
- 8. The same amplifier board is used
- 9. No change to the internal RF lineup is changed
- 10. Why the change? Heat considerations of the Class A amplifiers. Also, inefficiency and higher power consumption. The 4dB gain in output power was almost negated by the 3dB loss via the output hybrid and cable. We gained only 1dB output and the 1dB was not cost effective for us.



Final PA in AR3530 dual configuration



Final PA unit in single configuration



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Previous dual configuration:

Note 3dB hybrid combiners on input and output



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Current Rev single AMP output:

Note missing hybrids and support cabling