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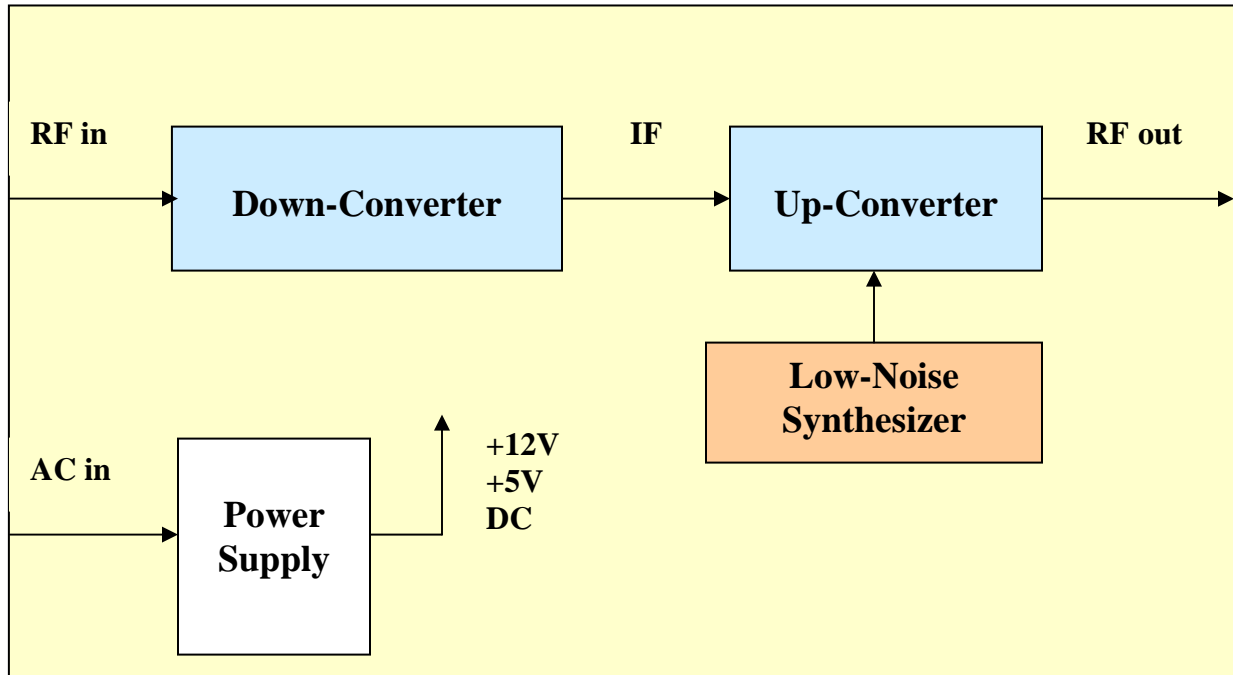
## **BLOCK DIAGRAM**

The TLUD-30-E is an agile solid state digital TV translator designed to accept a digital RF signal and outputs an amplified 8VSB signal on any UHF television channel.

From the AC-DC main power supply, the Processor takes 12 and 5Vdc for the boards in the module. The digital RF signal enters the processor module from the back panel on the enclosure. The unit consists of a RF down-converter and an up-converter as shown in the block diagram. The processor's internal AGC allows dynamically adjusting the power level of the module. The input nominal level is -50 dBm over a full admissible range of -17 to -77 dBm.

The input and output channels and also output level can be adjusted front the front panel. Processor passes the modulated 8-VSB signal to an RF amplifier which steps up the output level to 30 watts 8-VSB. The amplifier enclosure also contains a digital emissions mask filter. On units that potentially interfere with the RNSS band, the amplifier portion of the system also includes a GPS filter.

## Processor



## Power Amplifier

