

Operational Description:

The EC-70XHP-BB3 family of digital transmitters consist of four models. The four models are identical except for the number of GV4V0272 power amplifiers in the final section. The EC-701HP-BB3, has one output PA and has a max output power of 1100W in ATSC 1.0 (8VSB) modulation and 930W in ATSC 3.0 (OFDM) modulation. The EC-702HP-BB3, has two output PAs and has a max output power of 2200W in ATSC 1.0 (8VSB) modulation and 1860W in ATSC 3.0 (OFDM) modulation. The EC-703HP-BB3, has three output PAs and has a max output power of 3300W in ATSC 1.0 (8VSB) modulation and 2850W in ATSC 3.0 (OFDM) modulation. The EC-704HP-BB3, has four output PAs and has a max output power of 4400W in ATSC 1.0 (8VSB) modulation and 3800W in ATSC 3.0 (OFDM) modulation. The rest of the system consists of a Hitachi Kokusai Electric Comark Exact V2 digital exciter, Hitachi Kokusai Electric Linear CM-9001 Drive controller which outputs a 0dBm rf signal to each PA, a passive hybrid combining system, a Com-Tech LC77XC Low pass filter(or equivalent or more stringent filter), and a Com-Tech TF6D170C 6 Pole Mask Filter (or equivalent or more stringent filter). This system is used to provide an ATSC 1.0 or ATSC 3.0 modulated signal over the UHF channels 14 through 36 in a manner consistent with FCC Part 74.