DAR-1000A

Digital DTV Exciter for Multi-Frequency Network

Not only DAR-1000A directly converts the SMPTE-310 or ASI standard signals into the 8VSB signal, but also re-transmits different frequencies with the demodulation function which converts the terrestrial 8VSB signal into the SMPTE-310 or ASI standard signals.

Because it (Adaptive Corrector) automatically generates the correction factors of non-linear/ linear distortion and updates the correction table without interrupting the service, the transmitting signal quality is compensated from the effects of the ambient temperature and aging while the service coverage is maintained. Furthermore, it is capable of analyzing the parameters of Tx output signals, such as inter-modulation level, SNR, and etc.

DAR-1000A is a DTV Exciter codeveloped by DARBS Inc. and KBS TRI (Technical Research Institute) for the Multi Frequency Network.

Performance

SNR : ≥ 36dB
Frequency Response : < ± 0.5dB
Group Delay : < ± 25ns
Amplitude Error : < 1dB
Phase Error : < ± 5deg

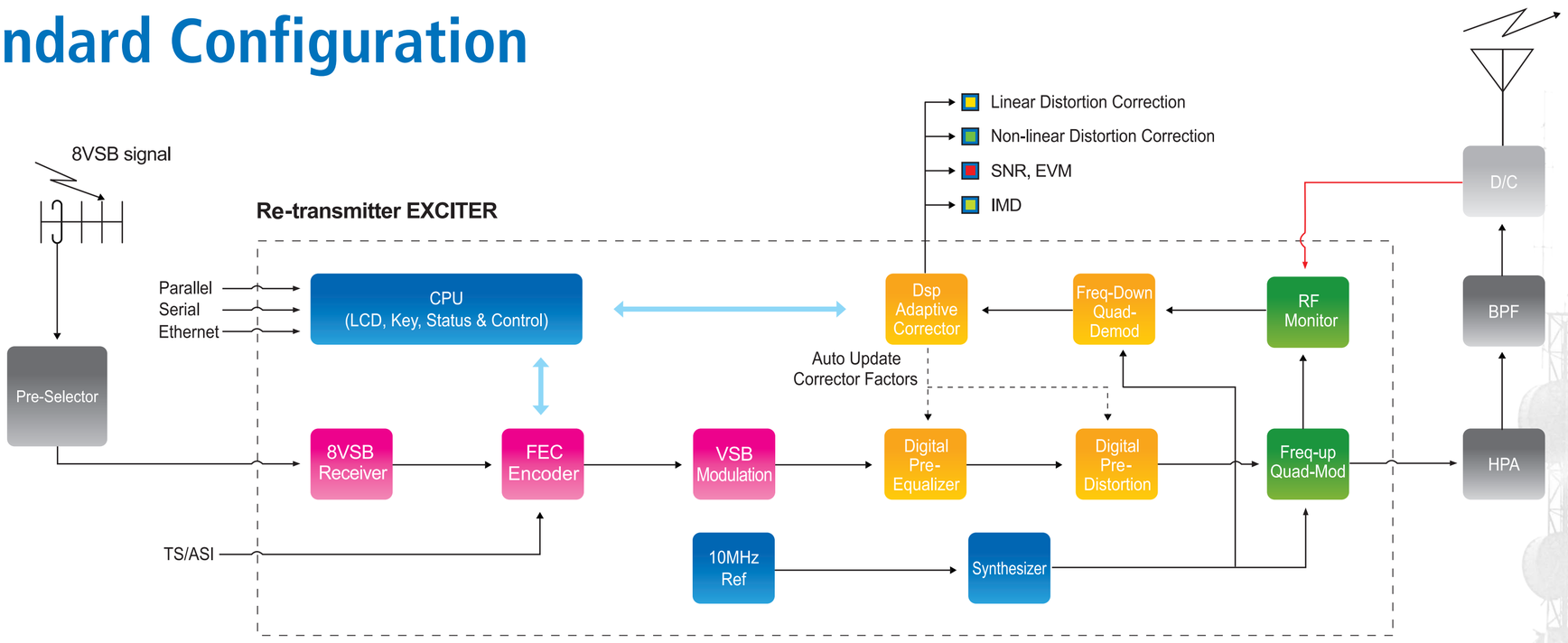
Peak to Average : 6.4dB@0.1%
Carrier Stability : < ± 0.5ppm
Frequency Tolerance : < ± 1.0ppm@Selected Channel
Phase Noise : -107dBc/Hz@20KHz offset
Sideband Performance : FCC Mask Compatible

General

RF Input Frequency Range : UHF 2 ~ 69
RF Output Frequency Range : UHF 14 ~ 69
RF Input Level : > -82dBm (BNC)
RF Output Level : -20 ~ +5dBm
RF Feedback Level : -15 ~ +5dBm

Dimensions(mm) : 480(W) x 44(H) x 550(D)
Permissible relative air humidity : 85%
Temperature : 10 ~ 45℃(Operating)
Power Supply Voltage : 100 ~ 220 AC

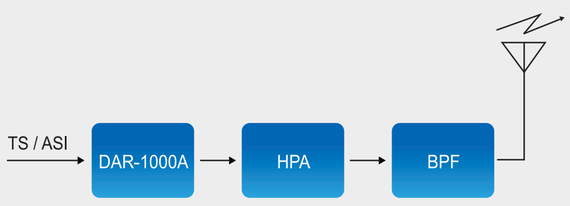
DAR-1000A Standard Configuration



DAR-1000A Application

Transmitter

The DAR-1000A transmitter directly converts standard TS input signals into an RF output. This capability enables the transmitter to help bridge the digital TV coverage gap.



Re-transmitter

The re-transmitter features error correction during demodulation of air broadcast input signals. These signals are then re-modulated to a different frequency.