

Advanced • TV™ Series



AT8001™ – ATSC Digital Exciter Mobile DTV Ready

**OFFERING INDUSTRY-LEADING BROADCAST SOLUTIONS –
EMPOWERING BROADCASTERS TO DO MORE WITH LESS**



FAST FORWARD TO DIGITAL WITH LINEAR PERFORMANCE

Linear's AT8001™ Exciter is Mobile DTV (M/H) A/153 standard compliant. Its unparalleled Non-Linear Pre-Correction capabilities delivers Memory Effects Compensation and Crest Factor Reduction, providing maximum amplifier efficiency and more Watts per Dollar. It further provides Single Frequency Network (SFN) implementation over the M/H Framework.

Not just digital. Better digital.™

Contact us today for more information.

Linear Industries, Inc. 2531 Technology Dr., Suite 310 ▲ Elgin, IL 60124 ▲ 1.847.428.5793 ▲ www.linear-tv.com

Highlights

- ▲ One-Click Automatic Non-linear and Linear Pre-correction
- ▲ Mobile DTV (M/H) Compatible
- ▲ Use of Non-linear Pre-correction with Crest Factor Reduction leads to a 1.9dB analog peak sync / 8VSB average power ratio

Applications

- ▲ DTV / Mobile DTV Transmitter
- ▲ Flash-cut Conversions
- ▲ DTV Translator (External Receiver / Decoder Required)

Features

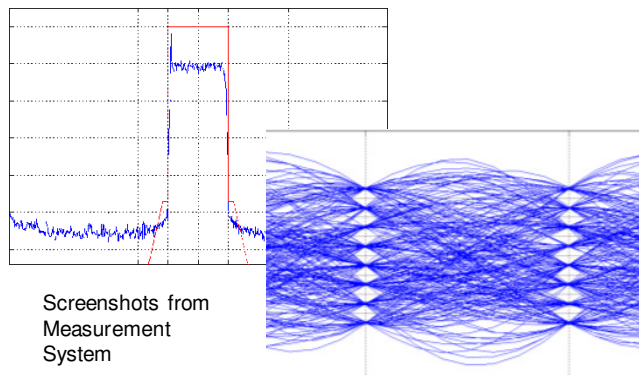
- ▲ + 20 dBm maximum output power @ VHF BI / VHF BII / UHF
- ▲ Non-linear pre-correction with Memory Effects Compensation
- ▲ Linear pre-correction with 4 μ s peak-peak group delay capability
- ▲ Measurement System:
 - Amplitude Modulus
 - AM/AM and AM/PM
 - CCDF
 - Constellation and Constellation Contour
 - Eye Diagram
 - Frequency Response and Group Delay
 - Power Spectrum Density
 - Symbols
 - Spectrogram and Spectrogram Contour
 - Time Domain
- ▲ Crest Factor Reduction: improves amplifier efficiency
- ▲ Compatible with A/153 – Mobile DTV
- ▲ Single Frequency Network compatible using M/H Framework

Features (cont.)

- ▲ Scheduler software to run corrections / measurements at scheduled times
- ▲ Internal GPS receiver
- ▲ Internal OCXO with +50 ppb frequency stability
- ▲ Selectable Timebase reference: Free run, Internal GPS, External 10 MHz, External 1 PPS, or Incoming Transport Stream.
- ▲ 1 Hz frequency step
- ▲ Front and rear USB device ports for Measurement system and pre-correction
- ▲ Front USB host port for firmware field upgrade using USB flash drive
- ▲ 2 SMPTE310M / ASI inputs automatic selectable for redundancy
- ▲ 2 ASI outputs from the TS rate adaption & PCR re-stamping
- ▲ Proprietary Bandwidth Reduction Technology

Options

- ▲ Opt.1 Linear Correction 4000ns (incl.)
- ▲ Opt.2 Non-linear Correction – Static (incl.)
- ▲ Opt.3 Non-linear Correction – Dynamic
- ▲ Opt.4 Measurement System
- ▲ Opt.5 Crest Factor Reduction
- ▲ Opt.6 ATSC MDTV
- ▲ Opt.7 SFN over ATSC MDTV
- ▲ Opt.8 Pre-Correction Scheduler
- ▲ Opt.9 Internal GPS Receiver



Screenshots from Measurement System