

# Advanced • TV™ 7 Series

AT7001 ATSC DIGITAL EXCITER



OFFERING INDUSTRY-LEADING BROADCAST SOLUTIONS—EMPOWERING BROADCASTERS TO DO MORE WITH LESS.



## FAST FORWARD TO DIGITAL WITH LINEAR PERFORMANCE

LINEAR has a complete range of cost-effective, high performance flash-cut exciter and transmitter solutions to get you on the air fast—or allow you to upgrade a current digital operation.

LINEAR hardware and software provides best-in-class performance. Proprietary digital pre-correction algorithms for non-linearity and equalization on passive components set us apart from the competition—along with our low cost of entry into the digital world.

LINEAR is a leading manufacturer of digital exciters and transmitters with state-of-the-art designs and world-class quality manufacturing.

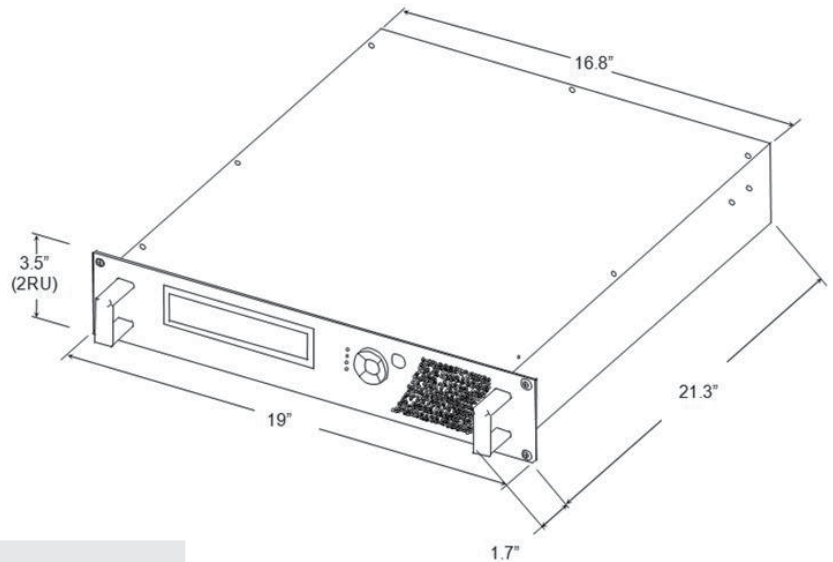
Not just digital. Better digital.™

Contact us today for more information.

# AT7001 ATSC DIGITAL EXCITER

## FEATURES

- ▲ Automatic "one-click" linear and non linear pre-correction
- ▲ 4 line x 40 column digital display
- ▲ PLL synthesized oscillator from a 10 MHz OCXO or by an external 10MHz reference (for example: GPS)
- ▲ Front panel error indication, current and past alarms
- ▲ 100mW (+20dBm) Output
- ▲ UHF Band channels 14 - 69
- ▲ Lightweight and only 2 RU



## TECHNICAL SPECIFICATIONS

### Electrical

RF Power Output	100 mW (+20dBm) - N Connector
Mains	90 - 240 VAC, single phase 50-60 Hz
Consumption	55 W

### Signal Input

Transport Stream Input	SMPTE310M or ASI
Input Data Rate	19.39 Mbps
External Reference Signal	10 MHz. (5dBm +/-3dB)
Input Connector	75 (BNC)
Reference Input Connector	50 (BNC)

### RF

Modulation Mode	8 VSB All digital Complex IF Modulation
Channel Bandwidth	6 MHz
Test Signal	PRBS (Pseudo Random Bit Sequence)
Frequency Range	UHF Ch 14-69
Frequency Step	1 Hz
Symbol Rate	10.76 MHz
Digital/Analog Converter	16 Bit
Non-linear pre-correction	Included
Linear pre-correction	Included
Spurious and harmonics	< -80dBc, FCC 47 Part 74
MER (Uncorrected)	≥39 dB

### Communication

USB

### Mechanical

Cooling	Forced Air
Dimensions	2 RU (H) 19" (W) 21.3" (D)
Weight	17.2 LBS / 7.8 Kg

## APPLICATIONS

- ▲ OEM low, medium and high power TV transmitter flash cut
- ▲ OEM digital transmitter upgrades
- ▲ Test Transmitter
- ▲ Universal Standby Exciter

## OPTIONS

- ▲ Test and Monitoring System (Opt. 3)
- ▲ Memory Error Correction (Opt. 4)
- ▲ Crest Factor Reduction (Opt. 5)
- ▲ Additional Group Delay Correction (Opt. 6)



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