



ADVANCED TV

DUAL SYSTEM UHF NTSC-ATSC Medium and Low-Power Transmitters Model: AT73K6-DS

LINEAR has 3 decades in the professional TV transmitter market and now is offering a new cost effective option for ATSC transmitters, the ADVANCED TV SERIES. LINEAR is assembling and is supporting this product line in the U.S. and for all North America.

Expansion of the digital coverage of TV networks is now focusing on medium and low-power transmitters. Operators will see with this product, a solution for the expansion logistics of coverage with quality on either analog or digital systems, reliability with low cost. The product integrates the benefits of a variety of friendly operational programmable features.

ADVANCED TV line meets the FCC and ATSC A/53 specification. Its incorporate the most recent techniques for oscillators phase noise control. We also offer a menu of suitable hardware options seeking to increase the operational efficiency under a specific TV network or local TV station demand.

The main RF amplification channel is composed of a 20W exciter, followed by 14 amplifier drawers. ALC circuitry continually monitors and keeps stability in the output power on the programmed level. Built-in either the linear and the non-linear programmable pre-distortion.

ADVANCED TV

FEATURES:

- ✓ SNMP interface for use in global management system, easily integrate to a network.
 - Remotely controlled
- ✓ Configurable by simple PC software
 - System Configuration and alarms
 - Line Up modifications
 - Operational records log
 - Power levels
- ✓ Digital Performance:
 - Shoulder Level: 41dB or better
 - MER: 39dB or better
- ✓ Protections:
 - Power Supply; Over-Current, over voltage
 - Excessive temperature
 - Excessive Reflected Power
- ✓ Self-cooling on the drawers
- ✓ Built-in RF power filters
- ✓ LDMOS technology
- ✓ IF Complex Modulation
- ✓ Power Factor Correction
- ✓ Soft Start
- ✓ Modular construction

OPTIONAL:

- ✓ External reference input allows optional GPS synchronization
- ✓ WEB interface LAN

ELECTRICAL:

Mains-standard	220/240VAC, bi phase, 50-60Hz, 3wire
AC Consumption	17200W.
PFC-Power Factor Correction	Included

SIGNAL INPUT:

Analog & Transport Stream Input	Video Composite/Audio. ATSC/MPEG2, Compliant to SMPTE310M, and ASI.
Input Data Rate	19.39 Mbps
External Reference Signal	10MHz. (0 to +10 dBm).
Input Connector	75 (BNC),
Reference Input Connector	50 (BNC),

RF:

RF Output Power - RMS	3600W
Modulation Mode	All-Digital Complex IF modulation
IF	18.833916 MHz.
Channel Bandwidth	6MHz.
Digital Test Signal	PRBS. Pseudo Random Bit Sequence
Frequency Range	UHF. Ch14 to Ch69, (4 bands).
Frequency Step	1 Hz. \pm 220kHz
Symbol Rate	10.76 MSymbol/sec.
Digital/Analog Converter	16 bit
All -Digital Linear. Pre-Correction	Included
Pilot frequency stability overall	\pm 0.3 ppm.
Peak to peak frequency response	0.15 dB.
Peak to peak group delay	15 ns.
Phase noise	-104 dBc/Hz @ 20kHz offset.
Conducted spurious & harmonics	< -60 dBc, FCC 47 Part 74.
Radiated spurious and harmonics	< -80 dBc, FCC 47 Part 74.
MER (Modulation Error Rate)	39dB (modulator output) typical. 39 dB (exciter output) typical. 29 dB (transmitter output) typical.
RF output connector	EIA 7/8" Flanged.
Output sample connector	N

REMOTE CONTROL

RS-232	Dial-up net interface via hyper-terminal
Ethernet	SNMP IP net interface via Web Browser

MECHANICAL

Air Refrigeration	Drawer's air speed: 400 ft/minute. Overall Air flow: 21ft ³ /sec.
Dimensions	48"(H), 28"(W), 43"(D) – 18 r.u.
Weight	NET: 435lbs, Gross: 547lbs
Foot print	28"(W), 7"(D)

Specifications may change without notice