



since 1990

UHF BIV-V TV TRANSMITTERS

**5A FAMILY
ELECTROLINK UHF BIV-V TV SOLID STATE TRANSMITTERS
READY FOR DIGITAL (DVB-T/H, ATSC, ISDB-T/Tb)**

air cooled / liquid cooled transmitters for 50W to 30kW

UHF BIV-V exciter with excellent specification

19" standard rack (12U - 24U - 36U - 40U)
clearly arranged and easily accesible

Solid-state broadband amplifiers

State-of-the-art LDMOS technology

Low junction temp. of the RF power transistors

Protective circuits for the RF power transistors

High suppression of intermodulation products

Very robust operation even with high VSWR

Remote control/monitoring via SNMP/WEB
interface (optional)

Efficient low noise forced air cooling

(1+1) active res. transmitting system

(N+1) passive res. standby transmitting system

User-friendly operation via graphical display

Easy installation, startup and maintenance

technical data



GENERAL INFORMATION	Frequency range	470 to 862 MHz
	Power supply	Single-phase 110Vac ±15% or 230Vac ±15% Three-phase 220Vac ±15% or 400Vac ±15%
	Frequency	50Hz / 60Hz
	Max. installation altitude	3.000m a.s.l. (>3.000 m on request)
	Operating temperature range	+0°C to +45°C
	Storage Temperature	-20°C to +70°C
	Permissible relative humidity	95 %, non-condensing
	Cooling system	Forced Air / Liquid Cooling System (depending on models)
RF CHARACTERISTICS	Vision/Sound power ratio	10/1 single sound - 20/1/0.2 dual sound
	Out stage technology	solid state LDMOS
	Vision - Sound amplification	Common
	TV Analog System Standards	B/G, D/K, M/N, PAL, SECAM, NTSC FM Mono, Dual-Sound/ Stereo, NICAM (Opt.)
	TV Digital System Standards	DVB-T/H, ATSC, ISDB-T/Tb
	Modulation class	C3F, F3E
	Sound transmission	FM sing.sound, dual-sound coding IRT, NICAM 728
	Harmonics emission	<-60dBc
	Spurious emission	<-60dBc
	Frequency stability	± 200Hz/6 months or ±2Hz/month (opt.)
	External reference	10MHz, 0.1V±5V (Vpp) or TTL/1pps TTL (Ref. Pulse)
	Offset capability	1Hz step up to ± 50 kHz
VISION	Video Input	BNC 75 Ω connector
	Nominal input level	1 Vpp ± 6 dB
	Video input Return loss	≥ 30 dB
	DC restoration	clamped to blanking level (no affecting burst)
	White limiter	@90% pict. signal (no affecting chrominance)
TRANSMISSION CHARACTERISTICS	Sideband spec. Amp/freq. resp.	according to the standard
	Non linearity dist.	≤ 5 % (10 to 75% mod.)
	Dif. gain / Dif. phase	≤ 5 % / ≤ ± 3° (10 to 75% mod.)
	Signal to hum ratio (f≤1kHz)	>50dB
	Signal to random noise ratio	≥56dB (unweig) / ≥60dB (weighted)
	Blank. level variation / 2T k factor	≤2% / ≤2%
	ICPM (picture range)	≤ 2°
	Intermodulation products	<-60 dBc
Intercarrier S/N ratio	>50 dB (referred to ± 50 kHz deviation)	

TRANSMITTERS Configuration

Equipment Model	Analog Out Power	DVB-T/H Power	ISDB-T/Tb Power	ATSC Power	N° of PWR Amplifier	Rack Dimension
5A0K5A	500Wps	300Wrms	300Wrms	350Wrms	1 (2 pallets)	12U
5A1K0A	1.000Wps	600Wrms	600Wrms	700Wrms	1 (4 pallets)	12U
5A2K0A	2.000Wps	1.200Wrms	1.200Wrms	1.400Wrms	2 (8 pallets)	24U
5A5K0A/T	5.000Wps	1.600Wrms	1.600Wrms	2.100Wrms	2 (12 pallets)	40U
5A7K5T	7.500Wps	2.400Wrms	2.400Wrms	3.200Wrms	3 (18 pallets)	40U
5A10KT	10.000Wps	3.200Wrms	3.200Wrms	4.100Wrms	4 (24 pallets)	40U
5A15KT	15.000Wps	4.800Wrms	4.800Wrms	6.200Wrms	6 (48 pallets)	2x40U
5A20KT	20.000Wps	6.400Wrms	6.400Wrms	8.200Wrms	8 (48 pallets)	2x40U
5A30KT	30.000Wps	9.600Wrms	9.600Wrms	12.300Wrms	12 (72 pallets)	3x40U

T: Liquid Cooled Version - A: Air Cooled Version



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