

DVB-T / DVB-H Transposers

EK 150-UU – 150 W

EK 200-UU – 200 W

The new family of DVB-T/H Digital Transposer and Gap-fillers is suitable for applications in the digital terrestrial broadcasting of TV programs with the classical transposer method with relay reception and

non remodulation broadcasting.

All the equipment can be configured to operate also for analogue TV system configuration.



Compact design, modular construction, plug-in modules from the front panel

LCD graphic display and soft keys to control the module parameters

Superior class AB pre-corrector, for both digital and analogue TV

Ultra low phase noise Local Oscillator

Modules for relay application

Broadband amplifiers

High reliability, long maintenance-free periods, friendly-service design

All redundancy configurations available on request (Dual driver; active reserve; N+1; 1+1)

WEB monitoring for remote control

CODE	MODEL	DESCRIPTION
F841.01	EK 150-UU	150 W UHF Band Transposer with output filter COMPACT
F841	EK 200-UU	200 W UHF Band Transposer with output filter COMPACT
AVAILABLE OPTIONS	Professional SAW filter - Precision TCXO	

Technical data

FREQUENCY	
Range	UHF (470-860MHz) - VHF Band III (174-260 MHz) - VHF Band I (45-90 MHz)
Internal reference frequency	5 MHz (or 10 MHz)
External reference frequency	Input From the front 5 MHz (or 10 MHz)
Output frequency stability	TCXO 1 p.p.m / year (opt.: OVEN < 0.2 p.p.m /years)
Frequency drift	Better than 10 exp-7
Amplitude/frequency response band	± 0,5 dB throughout the vision band
RF OUTPUT SPECIFICATIONS	
Output Power stability	± 0,5 dB
Intermodulation distortion	< -60 dB at rated output power (With pre-correction inserted)
Harmonics emission	< -75 dBc (with output filter)
Spurious emission	< -75 dBc (with output filter)
Impedance RF Connector	50 Ohm
Group delay deviation	± 30 ns within the vision band
Up converter A.G.C. dynamic	> 10 dB
Sync pulse compression	< 3 %
Differential gain	< 5 °
Differential phase	< 3 %
MER	Better than 36 dB
Phase noise	- 70 dBc @ 10 Hz ; - 85 dBc @ 100 Hz – 1 KHz; - 100 dBc @ 10 KHz
Protections	Overpower, Over voltage, Over current, Over temperature
Load mismatch	10 dB
Probe	IF monitor SMA connector (36.15 Mhz)

Off Lock Attenuation	> 60 dBc
S/N RATIO (weighted)	> 73 dB (referred to ± 75 KHz)
THD	0,10%
VSWR	Less than 1,5:1
TRANSPOSER VERSION	
Input Frequency	UHF (470-860MHz) - VHF Band III (174-260 MHz) - VHF Band I (45-90 MHz)
Input Impedance	50 Ohm N (Female) connector
Input field Level	-30 to -65 dBm
Input Matching	> 20dB
Selectivity	S.A.W. Filter 50° C
Synthesis Resolution	1 Hz
Noise figure	< 8 dB
IF Input level	-4 dBm ± 0.5 dB at RF input digital (0 dBm ± 0.5 dB at RF input analog)
Input matching	VSWR better than 1.2:1 in channel
REMOTE CONTROL	
Output Connector	RS232 interface Connector DB9 Male, RS 485, Auxiliary port 25-pole Connector
Ethernet interface (option)	Connector RJ 45 WEB browser or SNMP client
STANDARDS COMPLIANCE	
Frequency Spectrum	EN 302 296 – EN302 297
EMC	EN 300-489-1 EN 301 489-14
Safety	EN 60215
TEMPERATURE	
Temperature Operating range	0° to 45° C (Meets ETS 300 019 requirements)
Storage temperature	From -30°C to +80°C
Maximum relative Humidity	90% non condensing
Max Operating Altitude	2500 mt. a.s.l.



SPECIFICATIONS	EK 150-UU	EK 200-UU
RF output power rms	50 W	50 W
RF output power Psync	150 W	200 W
Output Connector	N Type Female	N Type Female
Dimensions (W x H X D) mm	482 x 132 x 450	482 x 132 x 450
Weight	17 Kg	17 Kg
Power consumption	Approx. < 700 VA	Approx. < 800 VA
Nr. of power supply boards	1 from 230 V a.c. ± 15%	1 from 230 V a.c. ± 20%
DC Power Supply	48 V (36-60 V)	48 V (36-60 V)
Number of fans	2 blowers, 24 Vdc	2 blowers, 24 Vdc