

## مشخصات فنی فرستنده های ۵۰ و ۱۰۰ وات

TKT-98/R100M/R50M DVB-T/T2		
<b>ASI inputs</b>		
ASI inputs number	2 (4)	
Connector type	BNC (female)	
Ts over IP	RJ45	
Impedance	75	Ω
Return Loss	≥ 13	dB
<b>Signal Processing</b>		
IFFT Mode	For DVB-T: 2K , 4K , 8K For DVB-T2: 1k, 2k, 4k, 8k, 16k and 32k Including extended carrier modes	
Interleaves	Native as well as in-depth and native DVB-H mod	
Guard Intervals	DVB-T: 1/4 , 1/8 , 1/16 , 1/32 DVB-T2: 1/4, 19/256, 1/8, 19/128, 1/16, 1/32, and 1/128	
Code Rates	DVB-T:1/2 , 2/3 , 3/4 , 5/6 , 7/8 DVB-T2: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6	
Constellations	DVB-T: QPSK , 16-QAM , 64-QAM DVB-T2: QPSK , 16-QAM , 64-QAM and 256-QAM ROTATED CONSTELLATIONS SUPPORTED	
Hierarchical Modes	DVB-H:16-QAM & 64-QAM in α-1 , α-2 and α-4	
Network Mode	MFN and SFN	
Bandwidth	8 – 7 – 6-5	MHz
Time modes	Adjustable	
Test Mode	Single tone, PRBS, SFN etc.	
<b>Internal GPS(option)</b>		
Connector	TNC 50 Ohm	
Input impedance	75	Ohm
Return loss	>13	dB

External Clock Reference		
Connector	BNC	
Frequency	10	MHZ
Level	100 mV-3 Vpp	
Impedance	50 Ohm/ > 1kOhm, user selectable	
Time Reference ( SFN timing )		
Connector	BNC	
Frequency	1 PPS	
Level	0-5 V	
Trigger	Selective rising/falling	
Impedance	50 Ohm/ > 1KOhm , user selectable	
Pre correction - Adaptive Digital Pre Correction (ADC)		
<b>Nonlinear correction</b>		
Curve formats	S21 and VO/Vi	
Amplitude scale	Linear and logarithmic	
Correction points	Max 256, user defined position	
Gain correction	Max 12 dB , subject to available headroom	
Phase correction	-6 to +30 degrees, subject to available headroom	
<b>Linear correction</b>		
Correction points	Correction points	Correction points
Output characteristics		
Output frequency band	UHF : 470 - 862	MHz
Amplification technology	Solid state	
Shoulders level at $\pm$ 4.2MHz	< -42 After Filter	dB
Shoulders level at $\pm$ 4.2MHz	< -38 Before Filter	dB
Output spurious and out of band harmonics	<-35 (Before filter)	dB
Output spurious and out of band harmonics	<-60 (after filter)	dB
Output power stability	< $\pm$ 0.2	dB
MER	> 37	dB
Output spectrum ripple after BPF	< $\pm$ 0.5	dB
Group Delay before BPF after BPF	< 40 < 250	ns ns
<b>Comment: Group Delay will be corrected by ADC better than 50 ns</b>		

Output impedance	50	Ω
RF connector	7/16" (female)	
<b>Power supply characteristics (Exciter Unit) TD-85 (Takta)</b>		
Input mains voltage (single phase)	Universal 88 – 264	VAC
Output Voltage 1	+5	VDC
Current Range 1	0.3 – 8.0	A
Output Voltage 2	+12	VDC
Current Range 2	0.2- 4	A
Mains frequency	47-63	Hz
Protection	Over Load - Over Voltage - Over Temperature	
<b>Power supply characteristics (High Power Amplifier Unit) RSP-1000(Mean Well)</b>		
Input mains voltage (single phase)	Universal 90 – 264	VAC
Output Voltage	43 - 56	VDC
Current Range	0 – 21	A
Mains frequency	47-63	Hz
Protection	Over Load - Over Voltage - Over Temperature	
PFC	0.95/230VAC	
<b>Environmental characteristics</b>		
Operating temperature	-5 to +50	° C
Operating Temp within Specs	-5 to +45	° C
Cooling	Forced air (intake/outtake air from saloon )	
Operating altitude	2100	m
Max, relative humidity (at 35°C) non-condensing	95	%
<b>Remote control</b>		
RS-232 serial interfaces (SUB-D9)	Available standard	
Web-Server (Ethernet 10-100 BaseT)	Available (Mozilla Firefox)	standard