



### 4.5-26MHz/ 5k/10kWatt /Transmitter

The 5kW/10kW communication transmitter can be used in high frequency communication systems to guarantee communication command.

- Serialization, generalization, modularization design;
- Digital processing of radio frequency signals;
- The power amplifier module is designed with modular plug-and-pull technology and has a good maintainability;
- Miniaturization design of filter;
- Output open circuit and short circuit protection;
- The dummy load for testing has an interlock control function, and when the dummy load is turned off, the transmitter cannot transmit power;
- Detection for each major functional module.



#### MAIN PERFORMANCE

Item	Performance requirements	Remark
Frequency range	4.5 ~ 26MHz	
Frequency stability	$\leq 1 \times 10^{-8}/d$	
Output power	5kW transmitter: $5kW \pm 1dB$ 10kW transmitter: $10kW \pm 1dB$	
Voice input	600Ω (balance) Line in -20 dBm ~ 10dBm	
Modulation method and bandwidth	Method: USB、LSB、AM Bandwidth: 1kHz、3kHz、6kHz	
	Method: ISB Bandwidth: 6kHz	
	Method: CW	
	Method: F1B Mid frequency: carrier frequency +1.7kHz Frequency offset bandwidth: $\pm 85Hz$ Baud rate: 100b/s	
Audio frequency modulation characteristics	$\leq 1dB$ (In the range of 300Hz and 3000Hz)	
Intermodulation components	$\leq -30dBc$	
Sideband suppression	$\leq -60dBc$	
Carrier suppression	$\leq -60dBc$	
Humming components	$\leq -50dB$	
In-band side wave	$\leq -60dB$	
Harmonic components	$\leq -70dB$	

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Parasitic components	$\leq -80\text{dB}$	
Out-band noise	$\leq -135\text{dB/Hz}$ (out of 5% off center signal)	
In-band noise	$\leq -90\text{dB/Hz}$	
Phase jitter	$\leq 5^\circ/10\text{ms}$	
Group delay	$\leq 500\mu\text{s}$ (600Hz~2880Hz)	
Audio harmonic distortion	$\leq 4\%$	
cooling method	Forced air-cooling	
Power consumption	$\leq 40\text{kW}$	10kW transmitter
	$\leq 20\text{kW}$	5kW transmitter
Size&Weight	700mm(L)×1680mm(W)×1430mm(H)	10kW transmitter
	$\leq 1500\text{kg}$	
	700mm(L)×545mm(W)×1430mm(H)	5kW transmitter
	$\leq 750\text{kg}$	
Environmental	Operating temperature: $-20^\circ\text{C} \sim +55^\circ\text{C}$ Storage temperature: $-40^\circ\text{C} \sim +65^\circ\text{C}$	

**Note:** This product will be developed upon contract/order. All the above specs are for reference only. Actual product may be different. Please check with KeyLink sales team if you have any question.

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