



**ELECTRICAL / COOLING / MECHANICAL DATA
HARRIS ZX5000, 5 kW FM TRANSMITTER**

All table values referenced to 5000 watt output power. Values are typical for PA only and do not include exciter(s).

PARAMETER NAME	VALUE						
ELECTRICAL							
Nominal output power	5000 W (FM)						
FCC type-notified output power range	FM	FM+HD			HD		
		-20 dBc	-14 dBc	-10 dBc	-20 dBc	-14 dBc	-10 dBc
	1.2KW – 5.5KW	1065W – 4.2KW	785W – 3.1KW	667W – 2.6KW	500W – 2KW	485W- 1.9KW	427W- 1.7KW
Power consumption (5.0 kW output in FM mode.)	8475W typical 9091W max						
AC power factor	0.98 typical						
Overall efficiency, AC input to RF output	FM		FM+HD		HD Only		
	Minimum	Typical	Typical		Typical		
	55%	59%	50%		35%		
AC mains configuration	Three, independent, single-phase inputs with PowerCon NAC3MPA inlets. (mating plugs provided) May be driven by any three 190-264VAC 50Hz/60Hz sources, as derived from a single-phase, delta, or wye service, as desired. Phase rotation not important. Optional AC distribution chassis to provide in-rack three-phase break-out and breaker protection available.						
AC input voltage (nominal)	190-264VAC						
AC protection size (Notes 1)	3 x 20C circuit breaker (double-pole)						
Recommended AC conductor size, #THHW wire (Note 2)	#12 AWG (4 mm ²)						
Line amps at nominal output (approx.) 208-240VAC	FM		FM+HD		HD		
	3 x 14 A		3 x 13 A		3 x 8 A		
AC mains entrances	AC connection made on the rear, top right corner of the transmitter chassis.						
Grounding / earthing	AC safety ground via third wire of mains inlets (PE green wire). AC safety ground should have unbroken connection back to earth post at mains distribution panel. Threaded ground stud provided on rear of amplifier chassis for connection to rack buss-bar where required by prevailing safety norms. RF ground via chassis rack mounting or low-inductance strap to chassis ground stud, if desired. EIA rack housing transmitter should be connected via copper strap to station RF ground. Connection should be via unpainted surfaces and soldered/brazed for low resistance.						
COOLING							
Cooling air volume	600 cfm (17 m ³ /min)						
Air inlet/outlet size	Cool air enters via front panel door with integral air filter. Heated air exhausts via five ventilated areas on amplifier rear door. Each air outlet has approximately 150 mm diameter (6"). One replacement inlet air filter shipped with each unit. Customized rack with ducted air output and/or input available as option.						
Heat dissipation and cooling requirements. (MAX TPO)	FM	FM+HD			HD		
		-20 dBc	-14 dBc	-10 dBc	-20 dBc	-14 dBc	-10 dBc
Watts	4500	4260	3140	2670	3714	3603	3176
BTU / h	15368	14548	10723	9118	12683	12304	10845
Tons	1.28	1.21	0.89	0.76	1.06	1.03	0.90
MECHANICAL							
	See Harris drawing 8398464033 for complete dimensional information						
Cabinet size	483 mm (19" EIA) W x 674 mm (26.52") D x 710 mm (27.97") H (16RU)						
Weight	Empty (less PA and PA power supplies) 35 kg (76 lb) - Full 95 kg (210 lb)						
Harmonic filter	Internal						
RF output connector	1 5/8" EIA flangeless, male						
Remote control connections	Parallel remote control interface 25-pin female 'D-sub' connector. Optional 'D-sub' connector to terminal board kit available. Optional remote web control/SNMP available via RJ45 connector. Both interfaces located on rear face of amplifier chassis.						

1. Wall-mounted circuit breakers are customer-supplied item. Three, single-phase, 20C breakers are recommended. Note: IEC "C" curve = 5x-10x inrush current.
2. All transmitter wiring should be done in conformance with prevailing electrical codes.