



ELECTRICAL / COOLING / MECHANICAL DATA
HARRIS ZX7.5, 7.5 kW FM TRANSMITTER

All table values referenced to 7,500 watt output power. Values are typical for PA only and do not include exciter(s).

PARAMETER NAME	VALUE								
ELECTRICAL									
Nominal output power	7,500 W (FM)								
FCC type-notified output power range	FM	FM+HD			HD				
		-20 dBc	-14 dBc	-10 dBc	-20 dBc	-14 dBc	-10 dBc		
	1.8KW – 8.2KW	1.5KW – 6.3KW	1.1KW – 4.7KW	1002W – 4KW	750W – 3KW	728W- 2.9KW	642W- 2.5KW		
Power consumption (7.5 kW output in FM mode.)	12931W typical 13636W max								
AC power factor	0.98 typical								
Overall efficiency, AC input to RF output	FM		FM+HD		HD Only				
	Minimum	Typical	Typical		Typical				
	55%	58%	50%		35%				
AC mains configuration	AC distribution chassis provides in-rack voltage breakout and breaker protection. One 3PH or two 1PH feeds connect to labelled WAGO connection blocks inside the AC distribution chassis.								
AC input voltage (nominal)	190-380VAC								
AC protection size (Notes 1)	1PH 230		3PH 208		3PH 380Y				
	2 X 40C		63C		40C				
Recommended AC conductor size, #THHW wire (Note 2)	8awg (6mm)		8awg (6mm)		8awg (4mm)				
Line amps at nominal output each feed (approx.)	FM		FM+HD		HD				
	3PH		1PH	3PH		1PH	3PH		1PH
	208D	380Y	230	208D	380Y	230	208D	380Y	230
	42	24	30	39	21	27	20	11	14
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 internal buss-bar. RF ground via copper low-inductance strap to internal buss-bar. Connection should be via unpainted surfaces and soldered/brazed for low resistance.								
COOLING									
Cooling air volume	1200cfm (34 m ³ /min)								
Air inlet/outlet size See note 3 for dimensions	Cool air enters via front panel doors with integral air filters. Heated air exhausts via top or bottom vents, user configurable. Two replacement inlet air filters shipped with each unit. Air inlet plenum with top or bottom ducted air input available as option.								
Heat dissipation and cooling requirements. (MAX TPO)	FM	FM+HD			HD				
		-20dBc	-14dBc	-10dBc	-20dBc	-14dBc	-10dBc		
	Watts	6750	6390	4710	4006	5571	5404	4765	
	BTU / h	23051	21822	16085	13680	19026	18456	16274	
	Tons	1.92	1.82	1.34	1.14	1.59	1.54	1.36	
MECHANICAL									
See Harris drawing 8398464033 for complete dimensional information.									
Cabinet size	562.1 mm (22.13") W x 914.4 mm (36") D x 2111.5 mm (83.13") H (44RU rack)								
Weight	225kg 500lbs								
Harmonic filter	Internal								
RF output connector	3-1/8" EIA flanged, male								
Remote control connections	Parallel remote control interface via terminal board. Optional remote web control/SNMP available via RJ45 connector. QTY 2 web remotes required. Both interfaces located at top rear of rack.								

NOTES:

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