



**ANYWAVE**

## **MAGMA SERIES**

### **PRODUCT SPECIFICATIONS**

# **LIQUID COOLED SOLID STATE UHF TV TRANSMITTER**

## **Introduction**

The Anywave **MAGMA** series of Liquid Cooled TV transmitters provides the broadcaster with the greatest power density and highest operating efficiencies in digital transmitters today. The **MAGMA** series delivers a broadband solution with peak levels of performance and reliability. These Solid State transmitters range in output power from 6kW ATSC (4.8kW OFDM) to 150kW ATSC (120kW OFDM), with 25kW ATSC output from a single rack. They operate across all modulation standards including DVB-T/H, DVB-T, DVB-T2, ATSC, ATSC3.0, ISDB-T and DTMB. The **MAGMA** series incorporates the powerful correction capabilities of the ACT 5X+ or 9X digital exciter platforms.

## **Key Facts**

- ✓ Multi-standard capability: DVB-T/H, DVB-T, DVB-T2, ATSC, ATSC3.0, ISDB-T and DTMB
- ✓ Transmitter efficiency up to 45% (amplifier efficiency > 50%)
- ✓ Implements latest state-of-the-art Asymmetrical Broadband Doherty Technology
- ✓ 16 x BLF888E (ultra high efficiency, Broadband) transistors provide power densities of 2.8kW (ATSC) per amplifier
- ✓ Modular for optimal flexibility and ease of maintenance
- ✓ Superior Liquid Cooling system incorporates Friction Stir Welded and Graphene Enhanced Thermal Management technologies
- ✓ Optitune™ technology automatically optimizes performance and efficiency at any power level
- ✓ Redundant hot swappable Power Supply Units
- ✓ Remote monitoring and control via Web Browser and SNMP

# Power Requirements / Dimensions

HPTV Series - UHF							
Number of Amplifiers / rack	2	3	4	5	6	8	10
Output Power (RMS) ATSC <sup>(1)</sup>	5,900	8,890	11,900	14,200	17,000	22,650	28,300
Output Power (rms) ATSC <sup>(2)</sup>	5,000	7,500	10,000	12,500	15,000	20,000	25,000
Output Power (RMS) COFDM <sup>(1)</sup>	4,700	7,100	9,500	11,400	13,600	18,100	22,600
Outpur Power (rms) COFDM <sup>(2)</sup>	4,000	6,000	8,000	10,000	12,000	16,000	20,000
Output Connector	3-1/8"				4-1/16"		
Height (inches / mm)	78 / 2000						
Width (inches / mm)	30 / 765						
Depth (inches / mm)	43.3 / 1100						
AC Input Voltage <sup>(3)</sup>	380VAC WYE Three $\phi$ , 5-wire (L1,L2,L3,N,GND)						
AC Input Frequency	50 / 60 Hz						
Consumption - Max. - KW	12.5	18.8	25.0	31.3	37.5	50.0	62.5
Consumption - Typical - KW	11.4	17.2	22.9	28.6	34.3	45.8	57.2
Current Rating Per $\phi$ - Max. (A) <sup>(4)</sup>	19	28.5	38	47.5	57.1	76.1	95.1

<sup>(1)</sup> Power measured before Band Pass Filter

<sup>(2)</sup> Power measured after Band Pass Filter

<sup>(3)</sup> An appropriate external transformer may be required to connect to AC mains service

<sup>(4)</sup> Currents are based on 380VAC 3-phase current draw



**Cost  
Effective  
100%**

**Reliable  
100%**

**Scalable  
100%**

**Dependable  
100%**

We have your broadcast transmission needs covered

[www.anywavecom.net](http://www.anywavecom.net)

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