



SOLID STATE AM-PDM STEREO C-QUAM TRANSMITTER

- 500Watt - 10.000Watt output power in continuous service : all parts used in these transmitters are oversized to guarantee the full power 24/24 hours even in hard environmental conditions.
- 522 – 1750 KHz DDS: Digital Direct Synthesizer, A synthesized exciter with advanced DDS technology ensures the best possible signal quality, the frequency of these amplifiers can be easily field tuned from 522 KHz to 1750 KHz without any parts modification.
- High Efficiency Output. The amplifier uses strong and reliable Cold-Mosfets in modern Class-E configuration for RF Power Amplifier and Class-D (digital) configuration for PDM (Pulse Duration Modulation) Power Modulator, minimizes the losses, increases amplifiers efficiency and Lowering the power consumption. These systems are widely used in the broadcast field, that assure long life and low maintenance costs.
- AM Stereo C-QUAM (Compatible Quadrature Amplitude Modulation) system, with our new product of these transmitter can provide the stereo broadcasting in the entire AM Band, with excellent of stereo separation (more than 35dB). Go digital any time – just add an HD Radio or DRM signal.
- Adjustable output power. The Solid state allows the adjustment of output power simply varying the input one.
- Electronic protections system assures an affordable and stable operation protecting units against major fault conditions. Every alarm event is displayed by front panel LEDs and can be resetted by manual control and/or automatic reset control.
- Full metering. All the main parameters of the amplifiers are front panel displayed by a complete measurement system.
- Soft-start circuit control: the gradual insertion of power supply eliminate transient problems during start-up.
- Forced air cooling. An oversized cooling system guarantees regular functioning and long life for the high power amplifier Module set even in hard environmental places.
- Meets or exceeds international standards for safety and electrical specifications.



Transmitter's Specifications:

1. AM STEREO C-QUAM EXCITER

Descriptions:

- * Micro Controller : MICROCHIP 16F877A-20
- * LCD Display : 16 Character, 2-Lines
- * Frequency Range : 522Khz - 1710Khz, Digital Synthesizer, 9/10Khz step
- * Carrier Frequency Stability : Within +/- 2Khz
- * RF Output : Digital TTL 15V/p-p, both Low Side and High Side Logic
- * Pilot Output : 25Hz, Digital TTL 5V/p-p
- * PWM Exciter : Programmable, High Stability X'TAL Controlled



- * PWM Frequency Stability : Within +/- 1,5Khz
- * PWM Output : Digital TTL 15V/p-p, both Low Side and High Side Logic
- * Neg. Limiter : Internal Adj. For 125% Modulation
- * Stereo Encoder : C-QUAM (Compatible Quadrature Amplitude Modulation)
- * CQUAM Modulation : Digital I & Q Modulator with Carrier Limiter
- * CQUAM Audio Matrix : 1+L+R, 1+L-R, L - R, and L + R processor
- * Phase Equalization : Internal Audio Delay 4uS/8uS, and Phase EQL.
- * Audio Mode : C-QUAM, Mono or IBOC (acc. From LCD menu control)
- * Stereo Separation : 40dB Minimum, 5Khz to 10Khz
- * Frequency Response : 50Hz to 10Khz +/- 0,5dB Any Modulation
- * Harmonic Distortion : L-R, Stereo 0,5% typical, L+R 0,5% Max. At 95% mod.
- * Audio Mode : C-QUAM, Mono or IBOC
- * Audio Input : 600 Ohm, XLR Balanced, both L & R Input, 0/+10dBm
- * External Input : IBOC / HD Radio ready
- * Power Supply : 220V/AC, 60VA Max.

2. AM POWER AMPLIFIER

Descriptions:

- * Micro Controller : MICROCHIP 16F877A-20
- * LCD Display : 16 Character, 2-Lines
- * Devices : MOSFET ULTRA FAST Switching, Advance Power Technology
- * RF - System : Class-E Polyphase / Multi phase RF Amplifier
- * PDM - System : Class-D PDM Amplifier
- * RF Modulated Output Power : 500-5KW (depend on models)*
- * RF Output Connector : Floating PL-259 Amphenol (others up on request)
- * Drive : TTL 15V/p-p, Low Side and High Side Logic Push-Pull
- * Power Supply : 300V/DC Current Flows depend on models*
- * Protection : VSWR, Power Limit, Current, VPA, Temperature
- * Cooling System : Forced Air Cooling
- * Humidity : Less than 95%

3 ATU, RF-FILTER and COMBINER

Descriptions:

- * Antenna Tuning Unit (ATU) DC Grounded for Lightening Protection
- * Frequency Range : 522-1710Khz, Tuned at one Frequency
- * Power Capability : 1000W-5000W (depend on models*)
- * Low Pass Filter : Butterworth 3-Poles, 5 Element
- * Line Section : True Lines Forward, Reflected, Modulation Monitor
- * RF Output Connector : PL-259 (AM500C, AM1C), Flange (AM2.5C, AM5C)
- * RF Spurious : Below -45dB
- * RF Output Impedance : 50 Ohm, Unbalanced
- * RF Metering : Analog Meter for more accurate reading

4. POWER SUPPLY UNIT

Descriptions:

- * HV-PSA System : Linear Power Transformer Full Wave Rectifying
- * HV-PSA Output : 300V/DC/ Current Capability depend on models*
- * LV-PSA System : Linear Regulated
- * LV-PSA Output : +/- 15VDC 5A Symetrical
- * RFI Filter : EPCOS High Power RF-Interference Filter
- * Input Voltage : 220V/AC/50Hz/60Hz +/- 5%
- * Protection : HV-Soft Start, MCB, MOV and Fuses
- * PSA Metering : Analog Meter for more accurate reading



5. 19" STANDART RACK (height depends on models)

6. POWER OUTPUT (AM Transmitter Models)

Descriptions :

- *AM-500C (500 Watt, Stereo CQUAM), 0% Modulation
- *AM-1C (1000 Watt, Stereo CQUAM), 0% Modulation
- *AM-2C (2000 Watt, Stereo CQUAM), 0% Modulation
- *AM-3C (3000 Watt, Stereo CQUAM), 0% Modulation
- *AM-4C (4000 Watt, Stereo CQUAM), 0% Modulation
- *AM-6C (6000 Watt, Stereo CQUAM), 0% Modulation
- *AM-8C (8000 Watt, Stereo CQUAM), 0% Modulation
- *AM-10C (10.000 Watt, Stereo CQUAM), 0% Modulation

FOR MORE INFORMATION

SMS : 0818213134 - WhatsApp : 081319996884 - BBM : 275753FB