

SENSE Series

High Efficiency FM Amplifier
Output Power Ranges 600W, 1300W, 2500W



When developing SENSE Series, the main target was: Always on Air, Less than 7 kg (15 lbs) of modules-weight, Easy maintenance, Low consumption and High Efficiency

- DIRECT ACCESS KEY TO MAIN COMMANDS
- SMART NAVIGATION KEYS WITH ESC COMMAND
- OVERALL STATUS SHOW BY LEDS
- AIR FILTER STANDARD
- ANALOG AND DIGITAL READY FM AMPLIFIERS
- HD RADIO AND DRM COMPATIBILITY
- UP TO 80% OVERALL EFFICIENCY
- PLANAR ARCHITECTURE
- 65:1 VSWR TOLLERANT
- FULLY RF AND POWER SUPPLY REDUNDANT
- PLUG-IN POWER SUPPLY REPLACEABLE
- SENSE AMPLIFIERS NATURAL OUTCLASS GREEN TECHNOLOGIES
- HIGH EFFICIENCY LAST GENERATION LDMOS TECHNOLOGY UP TO 85%
- TOTAL SPECTRAL PURITY: > -100 DBC SPURIOUS, > -84 DBC HARMONICS
- FULL RANGE POWER SUPPLY: 90-260 VAC MAINS VOLTAGE
- HIGHEST RF SIGNAL QUALITY
- REMOTE CONTROL BY TCP/IP: WEB + SNMP OF ALL SIGNAL PARAMETERS

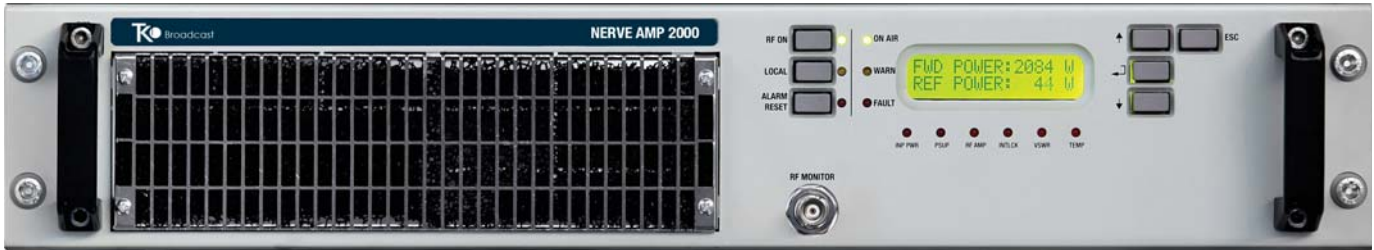
Output power 1300W or 2500W using High Efficiency last LDMOS technology housed into an ultra-compact cabinet of only 2U height.

For any application SENSE Series is the ultimate solution that meets most demanding customer requirements and guarantees professional features at affordable price.

HOT PLUG-IN POWER SUPPLY

Replace the power supply in ONE MINUTE 4 Steps

- Remove the front panel
- Pull Off the sliding power supply
- Insert the new Power Supply
- Install the front panel



OVERALL CHARACTERISTICS

Hardware and Software Protections

- Over and Under Voltage DC, Over and Under Voltage AC, RF and Power Supply Temperature, RF Coaxial Output Open or Short Circuit
- Capability of a long working time on Short/Open loads at all phase angles without any damage.
- Last generation 1400 W LDMOS, VSWR > 65:1 @ all Phase Angles, designed for enhanced ruggedness ISM applications and plasma generators.
- Integrated AC Mains filtering.
- Integrated lightning protection.
- Delayed energized of the system after Mains Power Blackout prevents against peaks and high variation voltages typical of this events.
- Soft controlled sequential start-up so to reduce the Inrush current during OFF to ON transition.

WEB/SNMP Telemetry and Remote Control

- Full Local or Remote control by by logon username and password.
- Remote control with Smartphones or Tablet.
- Host Logic and tele-measurement (TM, TC & TA).
- Remote control and monitoring via SNMP and/or WEB interface.
- With logbook or log file to record error or alarm message.
- Display of forward/reflection power value and reflection high alarm.
- TCP/IP, SNMP, GSM and PSTN TELEMETRY

Human Interface

- Each module is equipped with a logic controller that allows full control by a local operator.
- All transmitter and amplifier parameters required for diagnostics can be retrieved locally or remotely via standard (IP) protocol and standard software (web browser, SNMP).
- Multilingual user guidance.
- High Definition, high contrast Color Oled display.
- Quick set of thresholds for protections level. This set is based on assignment of three "flavors" or PERSONALITIES: Conservative (primary target = protect itself), Standard (balanced), Aggressive (primary target = transmission without interruptions).

TECHNICAL CHARACTERISTICS

SENSE Tech HIGH Efficiency.

- Output power on/off and adjustable from front panel and remotely.
- Overall Efficiency up to 80%.

- RF Input Connector: N Type.
- RF Output Impedance: 50 ohm.
- RF Output Connector: 7/16 Type. (other on request).
- Monitor RF: -57 dBc, BNC connector.
- VSWR: 1.5:1 Maximum with automatic fold-back at higher VSWR.
- Very high efficiency (more than 75%).
- Last LDMOS technology for power modules.
- Ultra High RF efficiency (>80 % typ.) software optimized for each power level.
- Lowest weight and dimensions in the industry.
- Lower device heating.
- Lower room heating.
- Lower space occupied.
- Lower maintenance needed.
- Small dimensions and low weight, reduce transportation costs and simplifying the logistic.
- Longer Component Lifespan.
- Reduced Electricity Costs.
- Lower Maintenance Costs.
- Reduced Cooling Costs.
- Fewer Fans.

Electrical Characteristics

- Very high harmonics suppression (-90dB).
 - Independent, individual APC (Automatic Power Control) circuit maintain a constant output power set.
 - Frequency-response-compensated directional couplers and precision internal indicators.
 - Distributed less binding Low Pass filter.
- AC Input Power: 220/400 VAC \pm 15%, 50/60 HZ single phase
 Power factor > 0.98.
 Cooling: Forced air

ENVIRONMENTAL

Operating temperature: -10°C to +50°C.
 Max Operating Altitude: 4000 mt.
 Relative Humidity Range: 0 to 95% non condensing.

PHYSICAL DIMENSIONS:

Mounting: Standard 19" chassis 2 U rack.
 Size: 485 mm. W x 550 mm. D x 88 mm. H.
 Weight: ~ 17 Kg.

