



LNP-2P Low noise power amplifier

Features:

- Controlled voltage mode
- Controlled current mode
- Bandwidth 60KHz
- Over temperature protection
- Over load protection
- Noise < 0.88mV rms
- Output $\pm 25V$ or $\pm 50V$ or $\pm 100V$



Description:

These power amplifier supply a controlled voltage (LNP) or controlled current (LNC) output.

In controlled voltage (CV) mode, the output is an amplified voltage representation of the input voltage signal. In controlled current (CC) mode, the output is an amplified current representation of the input voltage signal. If the load's impedance changes, the amplifier seeks to maintain the desired voltage (in CV) or current (in CC).

Application:

- Magnetic Resonance Imaging
- Power Industry Testing
- Manufacturing
- Positioning



LNP-2P Low noise power amplifier

Specification:

- These amplifiers provide precision amplification of signals with frequencies from dc to over 60 KHz. Much higher frequencies are attainable, depending on application.
- Important features of the amplifiers include:
 - Protection circuitry prevents damage due to high line voltage, overtemperature, RF burnouts, input overload, excessive output demand, mismatched loads, shorted loads, and internal malfunction.
- Maximum output voltage of 100V rms into 4 Ω .
- Maximum slew rate of 36 V/ μ s for the LNP (20V/ μ s for LNC).
- Residual noise for the LNP is only 0.88mV rms (0.55mV for LNC) from DC to 100KHz.
- Input impedance for the LNP is 20K Ω (25K Ω for LNC).
- Physical
- Chassis: Aluminum with steel reinforcements
Finish: Tan and brown two-tone panel coated with durable textured polyurethane
Indicators, Controls and Connectors:
Standby Indicator
Voltage Meter & Current Meter
Accessory analog meter location
Input Coupling Switch (switches between ac or dc coupling of input) on LNP; Input Attenuator (attenuates input signal) on LNC
Power Switch
- AC power Input 110/220Vac
High Voltage Fuse
Low Voltage Fuse
Low Frequency protect Switch (when selected, initiates standby when dc-10Hz at 10V or more appears at the output)
Delay Switch (when selected, invokes a four-second delay whenever turning on power switch)
Interlock (signals and controls for multiple amplifier systems)
- Output (five-way binding posts)
Output (barrier block)
- Voltage input mode gain 2.5 or 5 or 10 or 20
 - Model and option
 - CV Low noise power amplifier
LNP-1P \pm 25V, 2A, 100W
LNP-2P \pm 25V, 4A, 200W
LNP-3P \pm 25V, 6A, 300W
LNP-4P \pm 25V, 8A, 400W
LNP-5P \pm 25V, 10A, 500W
LNP-10P \pm 25V, 20A, 1000W

LNP-2PS \pm 50V, 2A, 200W
LNP-4PS \pm 50V, 4A, 400W
LNP-6PS \pm 50V, 6A, 600W
LNP-8PS \pm 50V, 8A, 800W
LNP-10PS \pm 50V, 10A, 1000W

LNP-2PSS \pm 100V, 2A, 400W
LNP-4PSS \pm 100V, 4A, 800W
LNP-6PSS \pm 100V, 6A, 1200W
LNP-8PSS \pm 100V, 8A, 1600W
LNP-10PSS \pm 100V, 10A, 2000W
 - CC Low noise power amplifier
LNC-1P \pm 25V, 2A, 100W
LNC-2P \pm 25V, 4A, 200W
LNC-3P \pm 25V, 6A, 300W
LNC-4P \pm 25V, 8A, 400W
LNC-5P \pm 25V, 10A, 500W
LNC-5P \pm 25V, 20A, 1000W

LNC-2PS \pm 50V, 2A, 200W
LNC-4PS \pm 50V, 4A, 400W
LNC-6PS \pm 50V, 6A, 600W
LNC-8PS \pm 50V, 8A, 800W
LNC-10PS \pm 50V, 10A, 1000W

LNC-2PSS \pm 100V, 2A, 400W
LNC-4PSS \pm 100V, 4A, 800W
LNC-6PSS \pm 100V, 6A, 1200W
LNC-8PSS \pm 100V, 8A, 1600W
LNC-10PSS \pm 100V, 10A, 2000W