

ND2500TT/6

SPECIFICATIONS

Frequency Range

405 - 535 kHz selectable in 100 Hz steps with Direct Digital Synthesis

Power Rating

2.5 kW carrier in A1A and F1B, 2.5 kW PEP in A2A, adjustable down to 500 W

Channels

Up to 6

Carrier Frequency Stability

Better than ± 10 parts per million of nominal over full environmental range

Emission modes

A1A - carrier keyed ON/OFF
A2A - carrier and modulation keyed ON/OFF
F1B - FSK with ± 85 Hz shift

Modulation (A2A)

Nominally 1000 Hz adjustable within $\pm 5\%$. Other center frequencies available upon request.
Modulation level continuously adjustable from 0-95%

Envelope distortion

Less than 3% at full power with 1kHz 95% modulation

Keying Rate

30 baud maximum A1A and A2A modes
100 baud maximum in F1B mode

Keying Bandwidth

Meets requirements of CCIR recommendation 328-3

Harmonic Emissions

Better than -80 dB when used in conjunction with companion Antenna Tuning Unit and a standard antenna.

ON/OFF Keying Ratio

Better than -120 dB

Hum and Noise

-60 dB relative to PEP

RF Load Impedance

50 ohms unbalanced
Type "N" output connector standard. Other connectors available upon request.

Load Mismatch

Will accept any value of SWR without damage

Controls

Local
Extended
Remote Control via an RS232 interface using NAX51 option

Environmental Limits

-10°C to +55°C (storage -40°C to +65°C)
0-95% humidity (non condensing)

Overall Efficiency

Better than 70% (Typically 73%)
(AC in to RF out)

Cooling and Heat Flushing

Forced air at approx. 180 cu.ft/min., 2560 BTU/hr. max.

Power Requirements

198-242 V, 50/60, three phase, 3 or 4 wire
385-465 V, 50/60, three phase, 3 or 4 wire
Other voltages available
Single phase option available for F1B Emission mode only

Power Consumption

3.8 kVA maximum at 0.95 power factor

Physical Size

24" wide x 24" deep x 74.5" high
(61 x 61 x 89 cm)

Weight

450 lbs
205 kg

ND4000TUT/A

This Automatic Antenna Tuning Unit is designed to automatically tune and match a transmitting antenna to 50 ohms at the operating frequency of the ND2500TT/6 transmitter.

Tuning is accomplished by a fast, closed loop, servo system, which

moves copper tuning slugs in or out of a pair of coils with astatic windings. The astatic windings provide two advantages. They minimize losses by reducing the stray field around the ends of the coils and they also greatly reduce any detuning when the cabinet door is removed. Maximum tuning time is less than six seconds when changing from 405 to 535 kHz.

A tuning enable control from the transmitter inhibits tuning when the transmitter is not keyed. This prevents the unit from retuning to any unwanted signals received by the transmitting antenna.

All of the AATU electronics, including probes, are housed in a removable assembly to facilitate servicing and maintenance.

ND4000TUT/A

SPECIFICATIONS

Equipment Type

ND4000TUT/A

Frequency Range

405 to 535 KHz

Inductance Tuning Range

The overall range of the initial inductance setting is 260 to 14 μ H (L max)
Range of automatic tuning, L max to 0.44 L max

Coil Series Loss Resistance

0.004 x antenna reactance (max.)

Input Impedance

50 ohms nominal

Maximum VSWR on Autotune

1•33:1

Power Rating

2.5kW, CW or PEP

Matching Range, Antenna
System Resistance
3-15 ohms

Channel Change Time

Not exceeding 6.0 seconds

Controls

ATU ON/OFF
Transmitter inhibit/enable

Metering

Forward Power, Reflected Power
and Antenna current

Environment

Outdoors, -40°C to +55°C,
0-100% humidity, tropical

Power Requirements

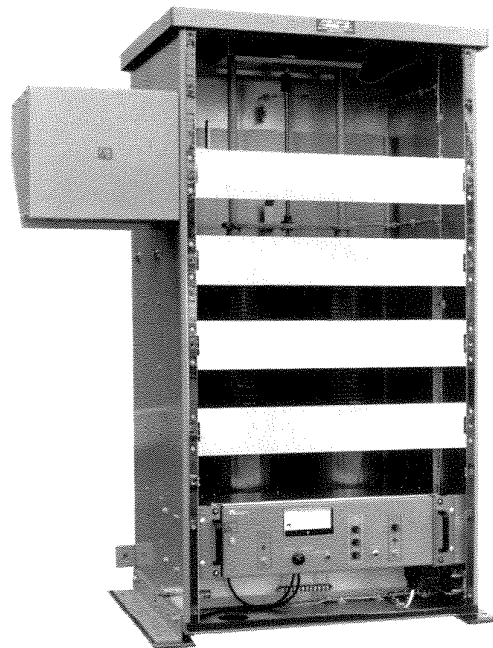
110/220V, single phase, 50/60Hz,
100VA max.

Size (D x W x H)

Height 125 cm (49")
Width 105 cm (41")
Depth 72 cm (28")

Weight

200 lbs
91 kg



FOR FURTHER DETAILS PLEASE CONTACT

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE