

ANTENNA TUNER

3240 1KW AUTOMATIC TUNER



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Codan's 3240 is an automatic antenna tuner developed to interface directly with Codan's 3061 and 3062 HF power amplifiers to provide reliable, high performance tuned antenna solutions for land and sea deployment, at RF power levels up to 1 kW.

HIGH PERFORMANCE

With 1 kW RF power handling capability, the 3240 can be used for full duty cycle data and voice, including frequency hopping, over the full 2 to 30 MHz HF band. The use of custom designed latching relays ensure that power draw when tuned is minimised, contributing to long term reliability, low noise and efficient use of energy.

The tuner has unlimited tune from memory capacity, and using a highly optimised tuning algorithm, new frequencies are tuned in typically less than 5 seconds, previously tuned frequencies are tuned within 150 mS. This means that HF systems using this tuner are fully compatible with high speed linking waveforms, such as 3G ALE.

FLEXIBLE ANTENNA CONFIGURATIONS

Both wire and vertical whip antenna elements are supported by the 3240, ensuring that varying requirements for propagation and installations constraints can be easily met. Antenna lengths as short as 5 m and from 10 m to 46 m are supported for 3-30 MHz and 2-30 MHz tuning ranges respectively.

POWER SUPPLY

The tuner has a separate rack mountable power supply unit which provides a power and control interface which will support cable lengths of up to 100 m. This enables the tuner and antenna to be located remotely from the radio equipment for tactical security or co-location requirements.

RUGGED DESIGN

The tuner housing is of rugged welded aluminium construction with, high quality, marine grade paint that is available in haze grey, desert sand or white finish.

For applications likely to experience high levels of vibration, for example shipboard, an optional shock mount accessory is available. When combined with the shock mount the tuner unit meets Military standards for shock and vibration.

KEY FEATURES

- 1 kW RF rating
- 2 to 30 MHz
- Fast Tuning
- Unlimited memory tune
- Tunes whips and long wire antennas
- Auxiliary receive antenna input
- Low current design
- ALE & Frequency Hopping compatible
- MIL-STD-810G
- NGT / Envoy / Sentry-H compatible

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SPECIFICATIONS

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Frequency range	Wire: 23 m to 46 m (75 to 150 ft) 2-30 MHz Whip: 10 m (32 ft) 2-30 MHz Whip: 5 m (16 ft) 3-30 MHz
Power rating	1kW PEP and Average
Duty cycle	Full voice and data
Input impedance	50 Ω
VSWR	Typically $\leq 1.5:1$
Tune time	Memory 150 ms, initial tune 5 sec (typical)
Tune power	10 W nominal, 50 W max
Memory channels	Unlimited
Tune modes	Fully automatic and memory
RF connector type	N-type socket
Control connector type	10 pin military screw connector
Auxiliary receive antenna connector	TNC
Auxiliary receive antenna power	12 V DC, 1 A max
Operational temperature	-20 to +55°C
Finish	Marine grade paint – haze grey, desert sand, white
Enclosure	Aluminium sealed to IP66
Certifications	CE for EMC, MIL-STD-810G (with shock mount)
Dimensions	350 x 380 x 330 mm
Packed dimensions/weight	500 x 500 x 500 mm; 25 kg

3220 POWER SUPPLY

Input voltage	230/115 (manually switchable)
Dimensions	2RU
AC power connector type	10 A IEC (fused)
Control connector type	15-way D connector
AC power switching	Tuner switching may be slaved to radio or controlled by PSU

Values noted are typical. Equipment descriptions and specifications subject to change without notice or obligation.

ACCESSORIES

- 3061/3062 HPA to 3220 PSU to Interface Cable, 1 m
- 3220 PSU to 3240 ATU Control cable, 30 m, 40 m, 75 m, and 100 m
- 3061/3062 HPA to 3240 ATU RG213 coaxial cable (UHF to N-type), 30 m, 40 m, 75 m, 100 m
- 3240 ATU Shock Mount Accessory
- 1 kW Long Wire Antenna