



HIGH POWER HF SSB SYSTEMS

FEATURES AT A GLANCE



- **Compatible interface with Envoy™ & NGT™ Transceivers**
- **Remote control capability**
- **Fault and overload protection**
- **Excellent linearity**
- **Single 27 RU free standing cabinet**

Codan's range of high power systems is suitable for voice and data transmissions. The systems are rated for 500 W and 1 kW peak envelope power (PEP) operation. These cater for the demand for competitively priced, multi-channel base station packages.

COMPATIBLE INTERFACE

The high power systems are interfaced for fully automatic operation with a CODAN™ Envoy™ or NGT™ Transceiver. Full control of the system is provided via the respective transceiver handset or desk console.

FULLY REMOTE CONTROLLABLE

The high power system may be fully remote controlled from the Transceiver handset or console. Remote control systems are available in conventional or split-site configurations, for leased line or IP connections.

ADDITIONAL FEATURES

Codan's high power systems offer a range of features including:

- **Automatic tuner protection:** when used with an external antenna tuner, the system automatically tunes on low power before engaging the high power amplifier.
- **Continuous mode operation:** the system is rated for continuous mode operation in all modes, and can be used for either data or voice transmissions.
- **Backup power (optional):** if an external backup battery is connected, the Transceiver will operate in Standby mode at 125 W PEP in the event of a mains power failure.
- **Amplifier fault detection:** a message displays on the Transceiver handset in the event of a system failure.

EQUIPMENT CABINET

The high power systems are delivered in a free standing cabinet, which houses the Transceiver, handset, speaker, high power amplifier and required power supplies.

The cabinet has room to accommodate a range of auxiliary equipment such as:

- Remote Control equipment
- HF Data Modem
- 3033 Telephone Interconnect

HIGH POWER HF SSB SYSTEMS

SPECIFICATIONS

Frequency range	1.6 to 30 MHz transmit, 250 kHz to 30 MHz receive
Output impedance	50 Ω
Operating temperature	-10°C to +60°C
Operating mode	Single Sideband (J3E) USB, LSB, AM (H3E), CW (J2A), AFSK (J2B), FSK (F1B)
Duty cycle	100%: normal speech over full temperature range 100%: all modes up to maximum ambient 45°C
Power supply	100 to 240 V AC \pm 10%, 50/60 Hz single phase
Power consumption	500 W system: 900 VA, 1.6 kVA maximum 1 kW system: 1.8 kVA, 2.5 kVA maximum
Protection	Safe under all load conditions Bypass to 125 W PEP from transceiver in the event of excess VSWR, excess heatsink temperature and internal fault conditions
Transmitting power	Backup: 125 W PEP 500 W system: 500 W PEP \pm 1 dB, 300 W average 1 kW system: 1000 W PEP \pm 1 dB, 600 W average
Spurious and harmonic emissions	Better than 60 dB below PEP
Intermodulation distortion	Better than 32 dB below PEP
Cooling	Fan forced front panel exhaust Thermostatically controlled dual speed
Size	27 RU (19" rack): 60.5 cm W x 51.5 cm D x 132.6 cm H

CODAN™ and NGT™ are trademarks of Codan Limited.
Other brand, product and company names mentioned
in this document are trademarks or registered
trademarks of their respective holders.

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



www.codanradio.com

RADIO COMMUNICATIONS

12-20021 Issue 10 6/2012

T: +61 8 8305 0311 **F:** +61 8 8305 0411 **E:** sales@codanradio.com
Codan Limited 81 Graves Street Newton South Australia 5074 Australia