



NAS100+ 100W VHF NAS TRANSMITTER



SPECIFICATIONS

Output power	0 to >100W continuous
Carrier frequency	70.000 to 77.500 MHz or 151.400 to 174.00MHz
Channel spacing	2.5 KHz
Carrier stability	<300Hz from nominal
Modulation	NBFM 5KHz peak deviation
Audio response	20Hz to 5KHz
Pre-emphasis	750, 75, 50uS or none
Distortion	<0.3%
Audio SNR	50dB typical
Line voltage	90-264VAC
Line power	<250VA
Audio input level	-10dBm to +10dBm
Input impedance	10K balanced
Protection	Over temperature Over line voltage Over SWR
Dimensions	Width 482mm Depth 270mm Height 134mm (3RU)
Weight (approx)	<8Kg
Cooling	Forced air
Audio connector	XLR female
Input line connector	IEC male
Output RF connector	N female
Telemetry connector	DB9 female

The NAS100+ is a solid state 100W VHF transmitter intended for the Narrowband Area Service bands.

The NAS100+ is fully compliant with AS4295 and has been type approved by ACMA.

Up to 100W of RF is available to overcome any multicoupler or transmission line losses, allowing NAS licence holders to reliably transmit at their maximum permitted power.

The heart of the NAS100+ is a microprocessor controlled, low phase noise, phase locked loop. This gives excellent audio performance whilst allowing total carrier frequency flexibility.

The signal from the PLL is amplified up to in excess of 100W by a broadband MOSFET stage. One advantage of this technique is a high level of tolerance to reflected power.

The audio input processors incorporate a Bessel anti-alias filter as well as a peak limiter. The user may also select the type of pre-emphasis applied to the audio.

Extensive telemetry functions allow all parameters to be read or programmed remotely, as well as allowing the front panel to be locked for non-secure locations.

Over line voltage, over SWR and over temperature protection are all standard.

Each NAS100+ comes complete with extensive documentation covering installation, use, maintenance and trouble shooting.

The NAS100+ is designed and manufactured in Australia and comes with a 3 year warranty.