NX4100

A REVOLUTION IN MOBILE COMMUNICATION SYSTEMS

Monitor systems - Control equipment
Track vehicles - Send messages

Nexion Data System radio modems integrate easily into existing analogue voice networks providing the benefits of both voice and data without major re-investment in radio hardware.

Save time. Save money.

FEATURES*

- Data rates to 8,000bps

- GPS data compression

- 128bit AES encryption*

- Remote digital I/O ports*

- 12.5Khz or 25Khz operation

- Adaptive channel equalisation

- Transceiver control*

- TX Forward / Reverse Power Monitoring†

- RSSI, DC Power and Temperature Monitoring†

- Unique electronic serial number

- Field programmable

- Simple Installation

The NX4100 is a high performance DSP based VHF/UHF modem developed as a plug in option for the Tait® TM8000 range of transceivers. Supporting raw data rates of up to 8,000 bits per second on a Narrow or Wide Band channel the NX4100 data modem affordably provides data rates previously not possible over conventional VHF/UHF transceivers.

As one member of the expanding Nexion family of modern data solutions, the NX4100 introduces itself as our first model specific plug-in transceiver module. As a 'single box' data solution, the NX4100 sets itself as the new standard in 'designed for simplicity', high-speed radio modems.

Under software control, the NX4100 incorporates multiple features that can be individually tailored to meet most customer demands. Advanced features include transceiver diagnostics reporting*, data encryption*, data compression*, remote I/O* and selective and broadcast addressing. Intelligent over the air data protocols maximise data throughput and reduce data collision.

Pre-configured out of the box for the Tait® TM8000 Series radio, NX4100 installation and operation is as simple as plug and play.

** Intelligent, easy to use DSP based high-speed data modem. Suits Tait® TM8000 series **

SPECIFICATIONS

Radio Requirements	Tait® TM8000 series VHF/UHF Transceiver (not supplied)
Data Transfer Rate	Up to 8,000 bps (Raw)
Error Correction and Detection	Variable FEC, CRC
Mode of Operation	Broadcast / Transparent
GPS Firmware	Intelligent GPS Management Firmware
Encryption Firmware*	Secure AES 128bit (Optional – Export restrictions apply)
Link Establishment Time	Typical <65mS, excluding transceiver TX/RX rise time
Processors	140 MIPS DSP + 8bit micro controller
Memory	2/4Mb Flash
Audio Bandwidth	500-2550 Hz ± 3dB
Serial Port 1	RS-232 with TXD, RXD, RTS, CTS, GND with link
Serial Port 2	RS-232 with TXD, RXD, GND
Remote Digital I/O Firmware*	Input x 2, Output x 5 (Optional)
Operating Temperature	-10° to +60° C
Primary Power	12 V DC nominal @ 95mA
	10-16V DC operating range
Size	As per Tait® TM8000 internal options board specifications

Notes:

*Availability subject to firmware release schedule

† Check with your Tait® dealer to ensure suitable firmware is fitted to the TM8000 series transceiver