NX2540

A REVOLUTION IN MOBILE COMMUNICATION SYSTEMS

Monitor systems - Control equipment
Track vehicles[‡] - Send messages

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

Save time. Save money.

FEATURES*

• Uncompressed data to 8,000bps

• Full Duplex (Analogue Repeater) Operation

• Vendor-Independent Interfacing

• Remote digital I/O ports

• Standard 2.5 KHz audio bandwidth

• Simple interfacing (minimum of 5 wires)

• Multiple serial ports

• Unique electronic serial number

• Field programmable

• Wide operating temperature range

The Nexion Mobile Data System (NMDS) is a complete high-speed mobile communication solution featuring simple integration into virtually any radio based transmission system. As a member of the NMDS family, the NX2540 is a high performance DSP based VHF/UHF radio modem supporting over the air data rates of up to 8,000 bits per second on a Narrow Band 12.5Khz channel.

Under software control, the NX2540 incorporates multiple features that can be individually tailored to meet most customer demands. Advanced features include AES 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.

Integration of the NX2540 into existing repeaters can be accomplished without expensive modifications.

Superior design, built in intelligence and modular upgradeability make the NX2540 the new standard in high-speed radio modems.

SPECIFICATIONS*

Data Transfer Rate	Up to 8,000 bps (Raw)
Error Correction and Detection	Variable FEC, CRC
Mode of Operation	Broadcast/Transparent/Dial-Up/Store & Forward (1 hop)
Encryption	128bit (Optional – Export restrictions apply)
Link Establishment Time	Typical <65mS (excluding Transceiver TX/RX rise time)
Full Duplex Serial Operation	Yes (Full Duplex Transceiver/Repeater required)
Data Repeat Capability	Yes (Full Duplex Transceiver/Repeater required)
Repeat Delay	<160mS
Processors	140 MIPS DSP + 8bit micro controller
Memory	4Mb Flash
Minimum Transceiver Interface	
◆ Audio Input	400mVpp to 1.5Vpp - Impedance 100K ohm
◆ Audio Output	400mVpp to 2.5Vpp - Impedance 600 ohm
◆ PTT	Open Collector Output (maximum 100mA)
Audio Bandwidth	400-2500 Hz ± 3dB
Serial Port 1	RS-232 (TXD, RXD, RTS, CTS, DTR, DSR, CD, RI, GND)
Serial Port 2	RS-232 (TXD, RXD, RTS, CTS, GND)
Serial Port 3	RS-232 (TXD, RXD, GND)
Serial Port 4	RS-485
Status LED's	Power, TX, RX, TX+RX (diagnostics)
Remote Digital I/O	Input x 2, Output x 5 (Optional)
Other	Individual Electronic Serial Number
Operating Temperature	-10° to +60° C
Primary Power	12 V DC nominal @ 75mA
	10-16V DC operating range
EMC / EMI Compliance	C Tick
Size	110mm W x 75mm D x 26mm H (including connectors)
Weight	180g

* Please Note...

1. Features and specifications subject to change without notice and/or obligation.

2. Availability may be subject to future firmware release schedules.

3. Not all transceivers will have the capability of Serial or I/O Control.

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