

# NTS<sup>®</sup>

*Digital Networked Trunking*



 **TRIDENT**  
MICRO SYSTEMS

# NTS<sup>®</sup>

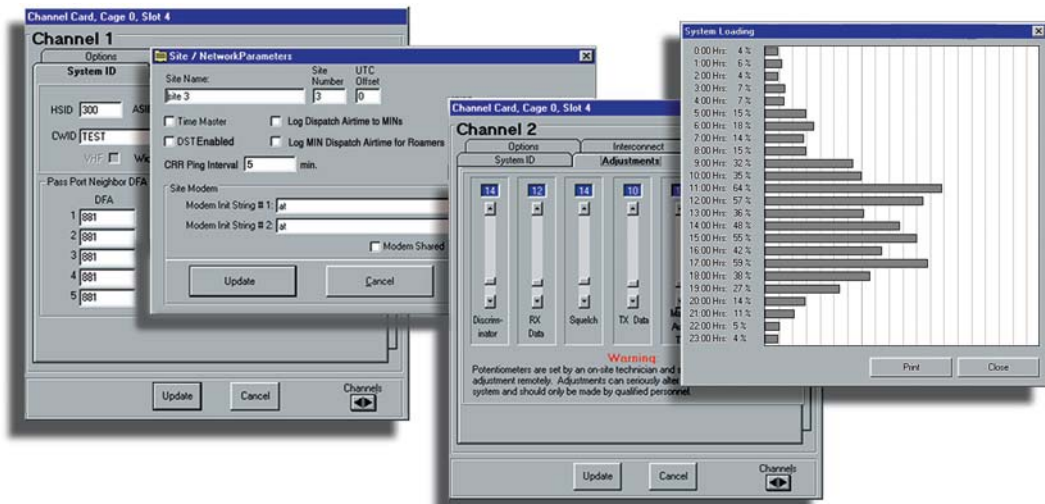
NTS, from Trident Micro Systems, offers a distributed digital trunking network infrastructure that grows with your needs. The NTS is a fully-scalable network solution that is easily expanded with plug-in application cards and stackable chassis'. And NTS is ready to grow with your digital radio migration requirements as well.



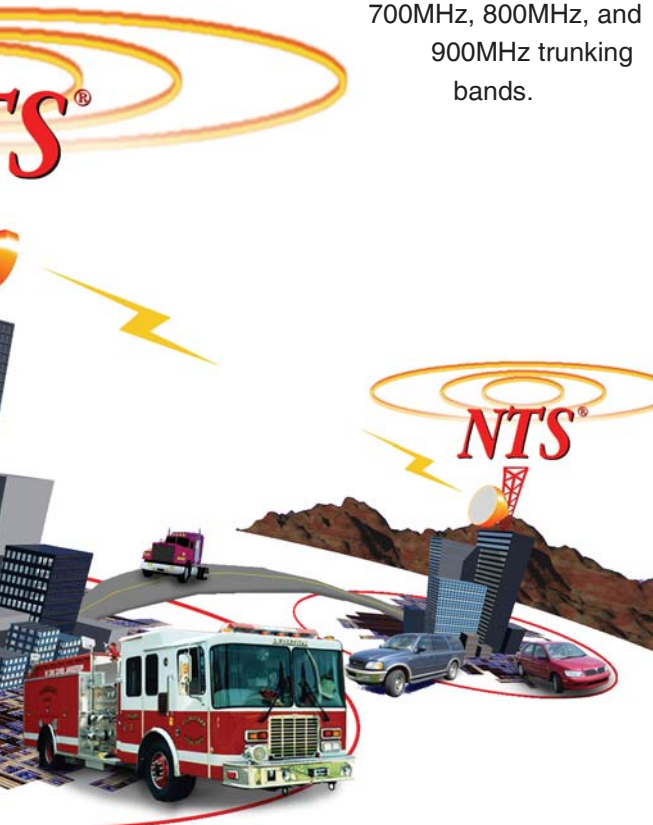
## NTS Commander

Trident Micro Systems has eliminated all manual adjustments from every NTS Application Card. NTS Commander's CyberTune<sup>®</sup> capability enables support and maintenance personnel to make all adjustments and system management changes via computer. Through NTS Commander, the NTS system may be accessed locally by connecting directly to the NTS or remotely via serial connection.

- Windows<sup>®</sup> application
- Network Commander allows complete management of entire network from a single connection
- On screen help
- User friendly



The NTS features the Master Card II, NTS Commander GUI application for Windows®, Dual System Clocks and Hot Swapable Application Cards. NTS supports Conventional operation, LTR® and the advanced **PassPort®** trunking protocol in the VHF, 217-222MHz, UHF, 700MHz, 800MHz, and 900MHz trunking bands.



## NTS Highlights

- Distributed Network architecture reduces operational costs
- Up to 127 individual sites per network
- Expandable up to 4 NTS Chassis' and 63 application cards per site
- All digital network design
- Interfaces to most repeaters and base stations
- Full featured telephone interconnect
- Flexible network layout options
- Network statistics and alarm reporting
- Configurable individual network-user profiles

# NTS Application Cards

## Master Card II

- Validation of Group IDs and Individual Mobiles
- PCMCIA Cards provide up to 128MB storage
- Automatic Fault Recovery
- Alarm and Error Management and Reporting
- Full Redundancy Available
- Maintains Application Card Configuration



## Dual Channel Card

- Two Channels Per Card
- Supports **PassPort®** and LTR® Enhanced Trunking Protocols
- Automatic Level Control
- CTCSS and DCS Conventional Signaling



## Dual Telco Card

- Two Telco Lines Per Card
- Signaling Methods Include: DTMF, Dial Pulse and Dial Click
- DSP Digital Hybrid for Superior Audio Quality
- 2 wire and 4 wire



## Dual T1 Card

- Two T1 Lines Per Card
- Supports Full or Fractional T1
- D4 and ESF Signaling
- Digital Voice and Data Transfer Between Sites



## Dual Console Card

- Two console lines per card
- Supports 2 wire, 4 wire, tone remote, 6 wire local or DC connections
- Direct interface to most consoles and remotes



## Digital Console Card

- Direct connection to Avtec and Orbacom Consoles
- Call supervisory to console
- Primary and redundant T1 connections
- Selective Call
- Network MIN/Alias Console display



# Specifications



Trident Micro Systems is the industry leader in the design and manufacture of trunking and radio networking infrastructure products. Trident's innovations include the *PassPort* trunking protocol. Introduced in 1999, *PassPort* has rapidly become the industry standard for trunked radio networks.

Trident Micro Systems... setting the standard of performance since 1985.



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## Chassis:

### Physical

Size	12.5"H x 19"W x 20.5"D
Mounting	19" Rack Mount - 3 Position Adjustable Ears
Weight	~60 lbs. All Chassis Slots Utilized
Air Filter	User Serviceable
Fan	Temperature Controlled

### Electrical

NTS Chassis available in DC or AC powered models.	
AC Supply	89 to 230VAC at less than 3 Amps
DC Supply	12 to 14VDC 8 Amps

### Environmental

Operating Temp.	-10 to 60 Degrees Celsius
Humidity	90% Non-condensing

## Application Cards:

All Application Cards are Hot Swapable, Card settings are automatically updated when card is inserted.

### Local Service Port Connection

Baud Rate	19200 Baud, 8, 1, None
Interface Type	DB-9 DTE
Terminal Emulation	ANSI-BBS Color

### Remote Maintenance Connection

Baud Rate	2400 to 57,600 Baud
System Parameters and Levels remotely adjusted via NTS Commander – Windows® Application	

### Master Card II

Controls up to 4 NTS Chassis'	Remote Firmware Upgrade
PCMCIA Cards 2 up to 128MB FLASH	Remote and local configuration interface
Master Clock with Automatic DST adjust	Remote and Local Alarms
Controls up to 126 RF channels simultaneously	

### Dual Channel Card

Discriminator Input	100mV to 1V
TX Audio Output	0 to 1 volt peak to peak
TX Data Output	0 to 1 volt peak to peak
PTT Output	Open Drain FET 200mA
Test Switch	Channel Busy / Disable Channel
Test Points	Discriminator and Low Speed Detect Levels

### Dual Telco Card

2 wire PSTN/DID Interface	Dial Click in (Adjustable)
4 wire E&M PSTN/DID interface	Digital DSP Hybrid (8 – 12PPM)
DTMF	Line termination 600 ohms
Dial Pulse out	

### Dual T1 Card

Two T1 Connections per card	D4 or ESF
Maximum Transmit level: 0 dBm	AMI or B8ZS
Receive level dynamic range: +2dB to -22.5dB	Full or Fractional T1

### Dual Console Card

2 wire	Maximum transmit level: +3dBm
4 wire	Maximum Transmit level: +6dBm
Tone remote	
6 wire local	
DC (with DC termination panel)	

### Digital Console Card

Avtec Console Compatible	Maximum Transmit level: 0dBm
Orbacom T5 Compatible	Receive level dynamic range: +2dB to -22.5dB
Call supervisory to Console	
Primary and redundant lines	