



# Nx56/64 BONDING

## ATLAS 800 Series Module

### Product Features

- Designed for disaster recovery applications
- BONDS multiple 56/64 kbps channels
- Implements BONDING Mode 1
- Capable of 32-128 kbps BONDING sessions
- Number of BONDED channels is user configurable from 2 to 32
- Can be used to restore Frame Relay or dedicated FT1/T1 links
- Supports DTR dialing, event driven, and terminal command BONDING
- Occupies a single slot in the ATLAS 800 series chassis
- Hot-swappable
- Flash upgradeable
- Industry-leading five-year North American warranty

**The ADTRAN® Nx56/64 BONDING Module combines multiple ISDN B-channels using the BONDING Mode 1 protocol to support high bandwidth ISDN applications such as dial backup of frame relay or dedicated circuits. The inverse multiplexing (IMUX) capacity of the module is 64 DSOs or ISDN B-channels (4.096 Mbps total), which can be allocated according to the user's needs. For example, one bonding session in an ATLAS™ system could be configured to bond eight B-channels as a dial backup link to a remote 512 kbps device such as the ISU 512™. Similarly, the total bonding capacity of the module might be configured to implement four sessions at 512 kbps, two at 384 kbps, and ten at 128 kbps. The table on reverse shows how many sessions can be supported at typical BONDING rates.**

The Nx56/64 BONDING Module has no external network or user interfaces. Network traffic is passed to it through other ATLAS modules such as the Octal BRI Module or the Quad T1/PRI module. Similarly, traffic is passed to the user through modules such as

the Quad Nx56/64 module. This partitioning allows the Nx56/64 BONDING Module to serve as a resource for multiple user devices.

When combined with the ATLAS 800<sup>PLUS</sup>/810<sup>PLUS</sup> and frame relay software, the Nx56/64 BONDING module can offer high speed dial backup around the network in frame relay applications. This same capability can be applied to providing dial backup of failed dedicated circuits or other network connections. Other applications that may call for the Nx56/64 BONDING Module include image transfer and video conferencing.

The Nx56/64 BONDING Module is compatible with the ISDN Dial Backup options of ADTRAN's Express 5000 series products as well as the IQ family of frame monitoring CSU/DSUs. It is also compatible with ISDN Access products such as ADTRAN's ISU 128® and ISU 512, as well as the ISDN dial backup options of the TSU family of T1 access devices.



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## ATLAS 800 Series Module

## Product Specifications

### Protocols

- BONDing mode 1

### Capacity

- Up to 32 128 kbps sessions
- Total bandwidth of 4.096 Mbps available

### Agency Approvals

- FCC Part 15, Class A, UL, Canadian UL (CUL)

### Physical Dimensions

- Size: 9.7" L, 6.0" W, 0.8" H
- Weight: 1.1 lb

### Power

- 6.6 Watts

### Environmental

- Operating Temperature:  
0°C to 45°C, 32°F to 113°F
- Storage Temperature:  
-20°C to 70°C, -4°F to 158°F
- Relative Humidity:  
Up to 95%, non-condensing

### Product Includes

- User manual

## Ordering Information

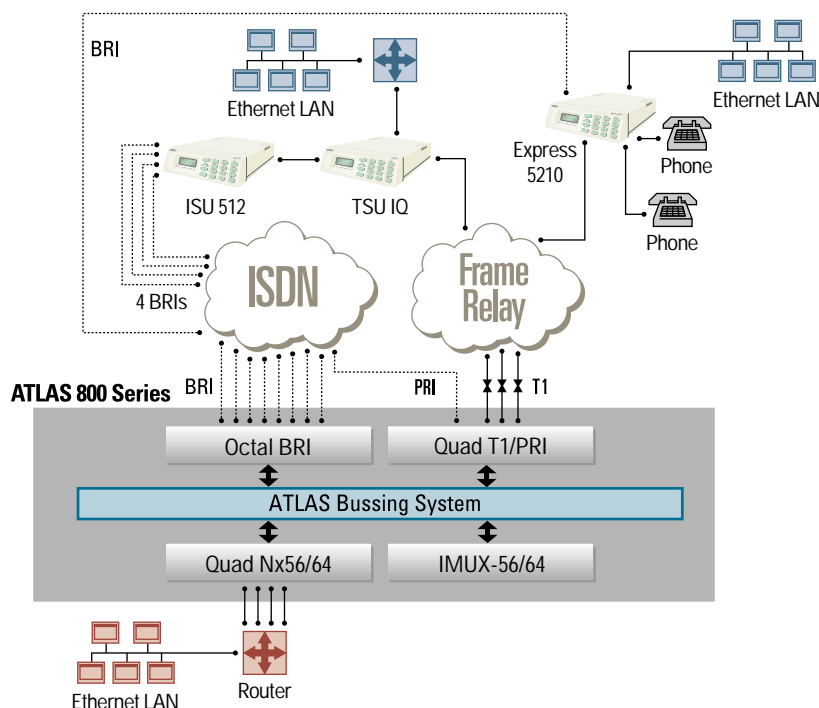
Equipment	Part #
Nx56/64 BONDING Module	1200262L1

## Capacity

As an example, a single Nx56/64 BONDING Module is capable of:

Session Type	Maximum
128k	32
384k	10
512k	8
1536k	2
2048k	2

In addition to the specific configurations described in the above table, it is possible to configure ATLAS for a combination of IMUX speeds, e.g., six 512 kbps sessions and eight 128 kbps sessions. Multiple Nx56/64 BONDING Modules can be installed in an ATLAS system to increase capacity.



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