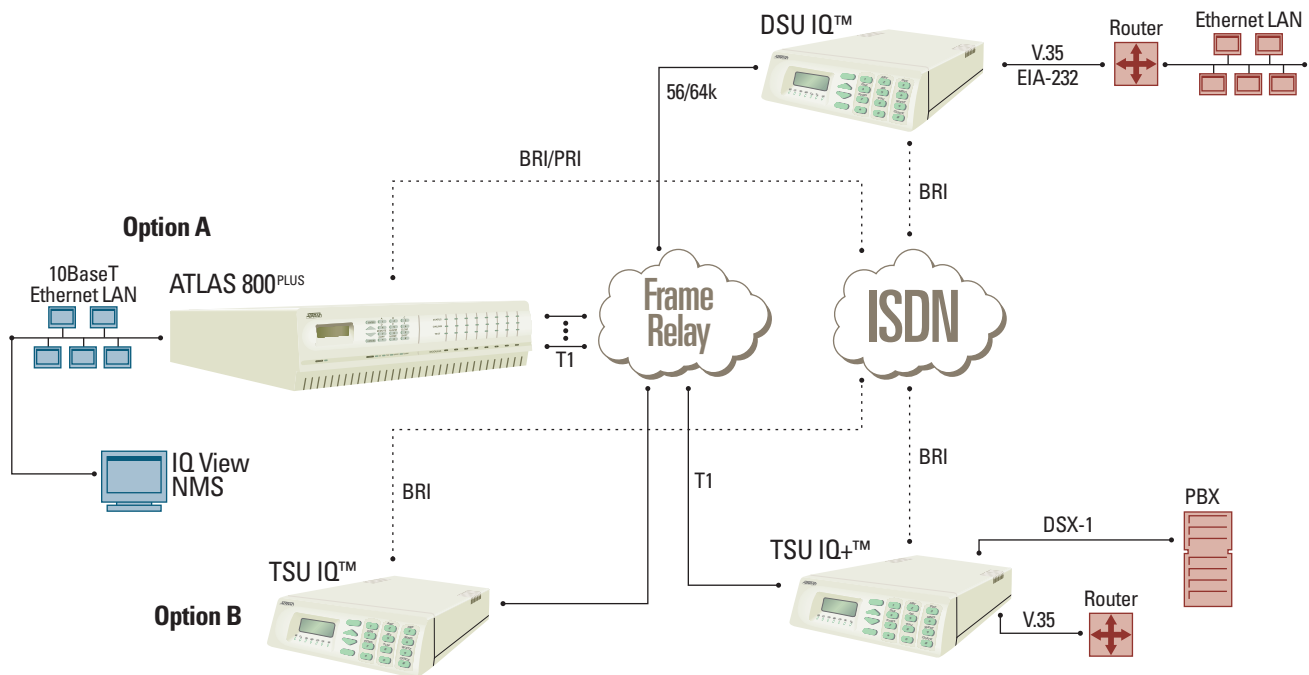


# Disaster Recovery

## Monitored Frame Relay Networks

Featuring  
ATLAS 800<sup>PLUS</sup> & IQ Family



Frame Relay services have grown from about 1,000 nodes to more than 50,000 nodes in just five years. The enhanced DSU/CSU, such as the ADTRAN® IQ family, have proved invaluable in proactively monitoring Frame Relay performance trends which allow network managers to find problems before they happen. The areas left vulnerable are the local loop and the Frame Relay network itself. If something happens to either one of these pieces, then it doesn't matter what statistics you have access to, your network is down. The ADTRAN IQ family gives you a solution for just this problem.

In the example, two host site options are shown. Option A is uses the ATLAS 800<sup>PLUS</sup> integrated access platform with a Quad PRI module, since multiple T1s of Frame Relay are needed (up to 6M of Frame Relay data is supported with the ATLAS 800<sup>PLUS</sup>). In this option, the primary Frame Relay link is being delivered over two T1 links.

Option B is using a TSU IQ with a BRI DBU card. The TSU IQ (or TSU IQ+) supports DBU for disaster recovery in host situations when only a single T1 is needed. When a line failure (something goes wrong with the local loop) or an LMI failure (something goes wrong with the Frame Relay network) is detected, the remote unit (a DSU IQ or TSU IQ+ in this example) will initiate a call "around" the Frame Relay cloud. The host unit, either the ATLAS or the TSU<sup>TM</sup>, merges backup traffic with the primary traffic still being received from the remote site that is not affected by the failure. Since the IQ products sit in front of the router, the router still receives all data as Frame Relay encapsulated traffic. So, the ISDN link is transparent to the router. Once the failure is cleared, the IQ products automatically restore traffic to the primary T1 link.

## SOLUTION FEATURES

- Medium to large host sites supported
- ISDN or SW56 backup support for remote sites
- Cost-effective approach
- Independent of the LAN
- Fully integrated solution

## ATLAS 800<sup>PLUS</sup> 1200226L1

- Supports 6M of Frame Relay
- Public or private Frame Relay support
- Integral router

## TSU IQ 1200215L1

- Supports T1/FT1 rates

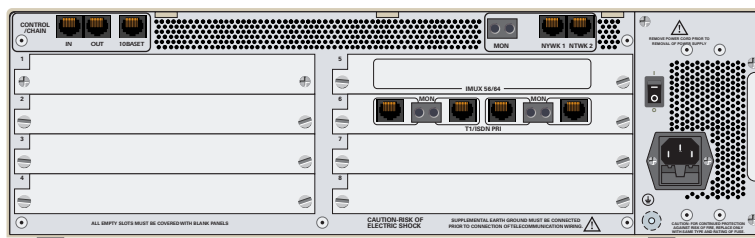
## TSU IQ+ 1200275L1

- Supports data and digital voice
- Supports rates up to T1/FT1

## DSU IQ 1200212L1

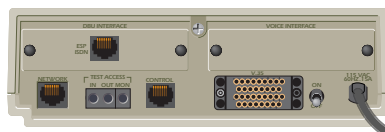
- Supports rates up to 56/64 kbps

## ATLAS 800<sup>PLUS</sup>



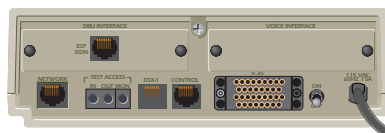
- ATLAS 800<sup>PLUS</sup> 10BaseT port supports IP routing over Frame Relay with software upgrade (P/N 1200263L1)
- ATLAS 800<sup>PLUS</sup> can be purchased with Frame Relay software (P/N 4200226L1AC, 4200228L1DC)
- Quad T1/PRI module (P/N 1200185L2)
  - PRI interface for dial backup
- Nx 56/64 - IMUX module (P/N 1200262L1)
  - Allows B Channel BONDing for greater than 64 kbps ISDN dial backup

## TSU IQ



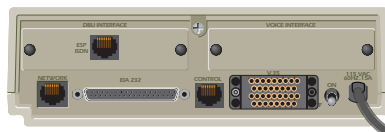
- BRI DBU card (P/N 1204004L1)
  - ISDN dial backup

## TSU IQ+



- BRI DBU card (P/N 1204004L1)
  - ISDN dial backup to the host IQ (or ATLAS) unit

## DSU IQ



- BRI DBU card (P/N 1204004L1)
  - ISDN dial backup to the host IQ (or ATLAS) unit

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