Adit 600
Converged Services Access Gateway

Key Features

- Fully modular design simplifies the migration to new VoIP and data services, while preserving existing capital investments

- Expandable platform delivers greater system reliability and scalability while providing a future-ready service migration path

- Flexible Multi-T1 or 10/100 Ethernet WAN interfaces

- High-capacity integrated SIP- or MGCP-based VoIP gateway supports up to 40 simultaneous calls per chassis (G.711 or G.729 codecs and T.38 Fax)

- New revenue-generating services can easily be added by installing hot-swappable service cards

- Advanced Ethernet/IP routing functionality includes VPN (IPSec, PPTP, L2TP), Stateful Firewall, NAT, and VLAN tagging

- Supports up to 8 bonded T1s (WAN), and up to 2 PRI/T1 CAS voice trunks from a single chassis

- Remote management options enable operational efficiencies and provide high service availability to SMB customers

Adit 600 Chassis
Maximum Interface Densities

Interface	Ports
T1	18
10/100 Ethernet	12
FXS	48
FXO/DPT	48
ISDNBRI	40
V.35	12
Terminal Server Router	24
E&M/TO	24

The Adit® 600 integrates VoIP gateway, IP access router, IP VPN, Firewall, channel bank, 1/0 DCS, CSU/DSU, and DLC in a compact chassis. The chassis is compact enough for two Adit 600s to be mounted side-by-side in a 2RU rack space. The high density architecture of the Adit 600 supports configurations up to 48 FXS or FXO ports, 18 T1s, or 12 10/100 interfaces.

A Gateway that Combines Multi-Network Access and Multi-Service Delivery Capabilities into a Single Chassis

With over 120,000 units in service, Adit 600 is the most widely deployed, carrier-grade Converged Services Access Gateway in the industry. Optimized for a wide range of applications, the Adit 600 combines multi-network access and multi-service delivery capabilities into a single chassis. This results in an extremely cost-effective, compact, and flexible access platform that simplifies the migration from TDM to next-generation VoIP and IP data services for service providers and small to medium business (SMB) customers. Unlike competing devices which provide only fixed configurations, the Adit 600 supports a fully modular architecture and hot-swappable service cards – delivering greater system reliability, scalability and a longer product deployment lifecycle. Additionally, the Adit 600 does not require fans for cooling, further increasing the reliability of the NEBS level three certified platform. The compact, 6-slot Adit 600 shelf is also only 3.5 inches high, and 8.5 inches wide, enabling two chassis to be mounted side-by-side in 2RU (rack unit) space.

A Broad Range of Services in a Single Scalable Platform

The Adit 600 integrates the functionality of a voice over IP (VoIP) gateway, Ethernet/IP access router, VPN/Firewall, channel bank, 1/0 digital cross-connect, CSU/DSU, and a digital loop carrier in a single chassis. The fully modular design of the Adit 600 is unique in its ability to support new revenue-generating services simply by installing new hot-swappable cards. Any service card can be placed in any of the six available slots. Flexible multi-T1 or 10/100 Ethernet WAN interfaces are supported, as well as a variety of standard customer interfaces and services including long reach FXS, FXO/DPT, 10/100 Ethernet, E&M/TO, V.35, ISDN BRI, Terminal Server Router (TSR), ADPCM, and T1. The Adit 600 provides a high-density design that supports up to 18 T1s, or 48 FXS/FXO ports per chassis.Modular functions that can be added to the Adit 600 via specific service cards include Ethernet/IP routing features such as VPN (IPSec, PPTP, L2TP), Stateful Firewall/NAT, andVLAN tagging. High-capacity SIP- and/or MGCP-based VoIP gateway functionality can also be integrated – VoIP trunking (PRI/CAS) or line termination (FXS) – to enable the delivery of converged IP services.

TELMAR NETWORK TECHNOLOGY
AN iQor COMPANY

TL9000   ISO 9001:2008 certified to new standards

Telmar Network Technology is a member of the QuEST Forum, an organization formed and dedicated to fostering quality and reliability in the telecommunications industry.

Adit 600 Converged Services Access Gateway

Chassis
Adit 600
- Wall mount bracket (included)

- Rack mount option: dual side-by-side 19 in (48.26 cm) or 23 in (58.42 cm) rack

- Dimensions: 3.5 in (H) in {2RU} x 8.5 in (W) x 12 in (D) 8.9 cm (H) x 21.6 cm (W) x 30.5 cm (D)

- Weight: 11.8 lb (5.35 kg) maximum (fully loaded)

Power
Standard 115 VAC/-48 VDC Power Supply/Charger

- Power supply with integrated battery charger

- AC power: 90 to 135 VAC, 60 Hz

- DC power: -42 to -60 VDC @ 3.5 A max

- Maximum power: 115 W

- Battery backup unit option (for external mounting)

Optional 230 VAC/-48 VDC Power Supply/Charger

- Power supply with integrated battery charger

- AC power: 190 to 254 VAC, 47-63 Hz

- DC power: -48 to -60 VDC @ 2.5 A max

- Maximum power: 90 W

- Battery backup unit option (for external mounting)

Optional 24 VDC Power Supply

- Power supply with ringing generator

- DC power: 21 to 29 VDC @ 6 A max

- Maximum power: 90 W

Environmental
- Operating temperature range: 32°F to 104°F (0°C to 40°C)

- Storage temperature range: -40°F to 158°F (-40°C to 70°C)

- Cooling method is by free air convection and requires long axis of unit to be mounted horizontally

- Maximum operating altitude: 10,000 ft (3.048 m)

- Maximum non-operating altitude: 40,000 ft (12,192 m) Relative humidity (non-condensing) range: 0% to 95%

Components
- Adit 600 chassis with six hot-swappable Service Card slots, single Controller Card slot and one Power Supply slot

Power supply options
- Combination 115 VAC/-48 VDC Power Supply/ Charger Combination 230 VAC/-48 VDC Power Supply/Charger 24 VDC Power Supply

Dual T1 Controller

Service cards available
- 8-channel FXS 8D Voice Service Card
- 8-channel FXO/DPT Voice Service Card
- 8-channel ISDN BRI Service Cards
- Dual-Port 10/100Mbps Ethernet Multi-Service Router (MSR) Card (SIP-based VoIP)
- Quad 4-Wire E&M/TO Service Card
- Hardened Dual V.35 Service Card with V.54 test capability
- Quad DS1 Network Access/Digital Cross-Connect Service Card
- Quad-Port Terminal Server Router (TSR) Service Card
- Customer Media Gateway-01 (CMG-01) Service Card (MGCP-based VoIP)
- Customer Media Gateway-02 (CMG-02) Service Card (MGCP-based VoIP)

Management
- SNMP in-band management over 10BaseT customer WAN connection or dedicated DS0 for out-of-band management

- Remote in-band management over T1 ESF Facility Data Link or dedicated DS0 for out-of-band management

- Hitless remote upgrade capable

Network Interfaces
- Dual T1 included with T1 Controller

- Framing for T1: SF (D4) or ESF

- Line code for T1: B8ZS and AMI

Network Standards
- ANSI/TIA T1.403 ESF FDL

- T1.403-1995

Clocking
- T1 reference timing with hold-over

- Internal Stratum 4E clock with hold-over

Alarms
- External Alarm: 6-pin connector (rear), one input, two outputs for major/minor alarms

- T1: LOS, BPV, Yellow, LOF, AIS

Testing & Diagnostics
- Configurable for CSU or NIU loopback codes, or disabled

- V.54 loop codes, QRSS, 2047, 2E20-1, 2E15-1 Test Patterns

Regulatory Compliance
USA
- UL60950, FCC Part 15, Class A, FCC Part 68 and RUS Listed Designed to meet NEBS Level-3GR-63-CORE and GR-1089-CORE

Canada
- CSA C22.2 No. 60950-00, ICES-003, Class A and CS-03

European Union (CE Mark)
- EN60950, EN55022, Class A, EN55024, Immunity, EN 300 386 V1.3.1, EN61000-3-2, Harmonics, EN61000-3-3, Flicker and CTR 12 and CTR 13

Australia/New Zealand
(ITE Applications only)
- C-Tick (Datacom), AS/NZS 60950 and AS/NZS CISPR22, Class A

Brazil
- Anatel-certified for specific telecom applications