MP 3600 Series Modular Security Router

MP3600 series modular security router is a kind of product, which is researched and developed independently by Atrie with special aims to meet the needs of enterprise network, and a real multifunction application support platform. It is designed according to drawer-type modular structure. Compared with MP2600, 2500 and 1600 series, MP3600 is provided with high processing capacity and access density to supply various module configurations in view of different application environment of users, fit for the branches of SME, dialing accessing application of enterprises, served as core router between LAN and LAN or multi-service application, or cuts in other routers in large-sized network.

MP3600 adopts MPC 8240 200MHZ special communication microprocessor made by Motorola Company with high extended and processing capacity so as to guarantee the staging capacity of equipment. MP3600 provides hardware encryption module, which has state authenticated an rich network safety features, fixed access of dumb terminal initiated firstly in the country and DLSw protocol, provides various processing mechanisms of network crisis to support VoIP and VPN value added service, provides rich QoS to provide high performance price ratio integrated service access, such as speech, video frequency and data for SME. Assorted with MP1600, MP2500 and MP2600, MP3600 can also provide plan of settlement of network with lower cost and high increment for large and medium enterprises of electrical communication, finance, tax, public security, railway and ISP. MP3600 follows strictly the standards of networks, is compatible with Cisco completely (even the exclusive protocol), can interconnect and intercommunicate with the products of other manufactures (Nortel, etc) in each protocol layer in order to protect the inherited investment of users.

Products Characteristics

1. Higher access port density
MP3600 series router provides four high-density slots, one interior socket; various high-density port modules to support 120-way signaling dial, 60-way analog dial, or can connect thirty two ISDN BRI dial users simultaneously, access to thirty two 2M synchronous / asynchronous serial ports or sixteen CE1, seventeen 10/100M Ethernet interface, can connect DDN, FR and X.25 network, provide plan of settlement for high-density remote access to meet the demands of increasing services of large-sized branches.

2. Hardware Encryption with State Authentication
Provide IPSEC and PKI hardware encryption module with state authentication to guarantee the safety of network transmission and interior data; provide rich measures for general network security protocol, such as firewall, package filtering, NAT, AAA, RADIUS, routing authentication, Callback, to avoid attacks from outside of network and make users select different safe strategies.

3. Construct VPN Network

MP3600 series router can support standardized PPTP, L2TP and MPLS protocols and be served as the network server of PPTP and L2TP. Enterprises donīt have to rent expensive long-distance leased line, and Intranet VPN can interconnect the distributed networks of enterprises through public network instead of traditional leased line network or networking pattern of other enterprises network in the form of extension; MP3600 can provide safety access to the resource of company headquarters through Internet for users (SOHO, etc) to make enterprises communicate safely and privately through Internet and reduce network cost greatly, VPN will become one of main patterns of enterprise network in the future.

4. Dial-on-demand and No-data Hang-up

MP3600 series router can provide perfect low-cost dial plan of settlement for users and realize the function of no-data hang-up through advanced built-in MODEM technology, assorted with DDR, can reduce the cost of communication greatly. 3600 can also support the standard DDR dial mode of external MODEM to meet the network demands of users. MP3600 can realize the sharing of physical interface of multiple dial users through Dialler Pool and the function of implementing different callings.

5. Processing Mechanism of Multiple Network Crisis's

Provide backup in multiple forms, use built-in MODEM as dial backup at ordinary times, switch to remote configuration mode through button and users and manufacturers can maintain anywhere so as to meet the demands of high-reliability network. With CE authentication, standard supply module can guarantee the protection of surge, over-voltage, low-voltage and over-current with stable and reliable output and can also support the protection of instantaneous power cut to guarantee the normal operation of equipment.

6. Overall Compatible to Cisco

Provide configuration interface and style similar to Cisco, the users familiar with Cisco are able to use them without any training, network management system can also be compatible to Cisco Works2000 and even can monitor the working condition of Cisco router through network management; MP3600 follows strictly RFC standard, Cisco router protocol only follows partial RFC (Cisco proprietary protocols, such as HDLC, EIGRP, DLSw+, etc), MP3600 can be compatible to Cisco completely. Pay attention to the small differences of some networking protocols of Motorola VGA series, 3COM NBII series, IBM routers, and interconnect and intercommunicate with each other in different network environments and layers of networking protocols.

7. Initiated FixTerminal Access

The financial system in the mode of on-line terminal often needs the access of integrated services of network IP, terminal, speech and PU. So MP3600 adopts the FixTerminal Access technology initiated by Atrie assorted with MP2600/2500 to realize the transition of access mode from traditional multiplexer to IP network so as to reduce the cost of network construction and make simpler and more flexible.

8. Supprt QoS

In the future, IP network will be required to be able to provide QoS. Aimed at different demands of users, 3600 can provide network service function of promised bandwidth with different service quality, support queuing strategies of PQ, FIFO, WFQ, CQ and RSVP, provide

SMEs with satisfactory multifunction service function with high performance and price ratio to realize the integration of three networks.

9. VoIP Secondary dial

MP3600 can provide various modules of IP telephones with function of "secondary dial", namely, not only dial in designated telephone terminal in the IP network through PSTN, but also dial in MP3600 telephone VoIP gateway through PSTN and then dial the IP telephone terminal in the IP network freely, with practical use value. Users can select different speech modules in terms of different conditions: 1-2FXS, 1-2FXO, 4FXS, 4FXO, E1 signaling. 1-2FXS and 4FXS modules are used to connect analog telephone, 1-2FXO and 4FXO modules are used to connect switch loop relays, 2E&M and 4E&M modules are used to connect switch E&M relays, E1 module is used to connect switch E1 relays. MP3600 can support standard H.323 protocol cluster, GK interface, interconnect and intercommunicate with VoIP manufacturers of Cisco, AudioCodec and Motorola.

10. Support DLSw Protocol

SNA, which was developed by IBM in early stage, had no relation with IP. Now, IP network has spread everywhere. The tunnel transfer of SNA data in the IP network by DLSw protocol has been developed to transfer the data of SNA network in the IP network.The protocols between SNA and DLSw, LLC2, and can make SNA compatible to DLSw PLUS protocol of Cisco completely and be used, extensively in the financial system. Atrie router is connected with Cisco through DLSw and LLC2, can connect ATM and front-end-processor, it has been in motion extensively, stably and reliably in the user network. MP3600 can realize the bridge and tunnel transfer of data cell of SNA protocol in the IP network, and support PU connection of QLLC, LLC2 and SDLC.

11. Route Transmission All-in-One

Route transmission all-in-one, which is difficult for most of companies, is realized by Atrie. There are many advantages brought by all-in-one. For instance, when main lines, DDN and FR, are broken down, Atrie router could switch to backup line automatically to transfer data without external MODEM and AT script. Built-in transmission modules include frequency band 336/56K MODEM, ISDN S/T/U, which are single-port or multi port, connecting private line or dial line. The whole network, which is only composed of a router and terminal equipment, has low equipment investment and fault rate.

12. Management of Hierarchical and Distribution Network

Support SHELL, WEB and SNMP centralized network management styles, implement multi-platform network management in large scale to realize the network configuration, network monitoring, account, accounting and maintenance of ATRIE equipment.

13. External Structure

Adopt standard 19inch shield electromagnetic radiation chassis, which can be placed on the standard rack. Due to the characteristics of antiknock, anti high/low temperature, anti-electromagnetic radiation and easy installation/disassembly, MP3600 can run more stably and reliably.

Specifications of Products

Item	MP3600
Type of processor	200MHz MPC8240
FLASH	8 MB, can be upgraded to 32 MB
System DRAM	32MB SDRAM. Can be upgraded to 256 or 512MB SDRAM
Network module slot	4 slots
Encryption	Encrypted by state authentication
Terminal service	Telnet or FixTerminal Access
Transmission	Support multiple frequency band and base band transmission
VoIP	Secondary dial, telephone gateway
Kinds of modules	Rich
Performance	48-67Kpps
LAN terminal on board	One or two self-adapting 10/100 M Ethernet terminal(s), can be extended to 16
Console, AUX	Support (Max. 115.2kbps)
Height X Length X Width	88 X 444 X 380 (mm)
Weight	10.45kg-15.45kg
Rack installation	Support, 19 in.
AC input voltage	90-265V 50/60HZ
AC input current	100V, 4A; 200V, 2A
DC input voltage	-38V -75V
DC input current	-48V,8A
Power	100W
Working temp.	0-45
Non-working temp.	-25-70
Relative humidity	0-95
Noise (Max.)	43 dbA
Routing protocol	Static routing, RIPv1, RIPv2, OSPF, DDR, EIGRP, BGP

Link protocol	PPP, SLIP, SDLC, FR, LLC2, ISDN, X.25, HDLC ; Ethernet_II, Ethernet_SNAP
Network protocol	IP, TCP, ICMP, UDP, FTP, TFTP, SNMP, TELNET, DHCP, BOOTP, DNS, PING, ARP, RARP, DLSW, SNA, LLC2
Consistency of specifications	Both of them follow a large number of different standards of security, EMI, interference immunity and network confirmation.

Module Specification:

Table of Module Configuration of MP3600 Router				
No.	Name of Modules	Pluggable Number	Label	Remark
MP020436-101	Simplex 10/100M rapid Ethernet module	4	RM3-1FE	
MP020436-102	2-way 10/100M rapid Ethernet module	4	RM3-2FE	
MP020436-103	4-way 10/100M rapid Ethernet module	4	RM3-4FE	
MP020436-104	4-way high-speed (8.192M) universal serial port module	4	RM3-4SA	Every port: 8Mbps
MP020436-105	8-way high-speed (2M) universal serial port module	4	RM3-8SA	Every port: 2Mbps
MP020436-106	8-way asynchronous port module	4	RM3-8A	Being researched
MP020436-107	16-way asynchronous port module	4	RM3-16A	Being researched
MP020436-108	Simplex CE1 PRI MODULE	4	RM3-1CE1	
MP020436-109	2-way CE1 PRI MODULE	4	RM3-2CE1	Split three simplex time-slot
MP020436-110	4-way CE1 PRI MODULE	4	RM3-4CE1	Split three simplex time-slot
MP020436-111	2-way FXS voice module	4	RM3-2FXS	
MP020436-112	4-way FXS voice module	4	RM3-4FXS	
MP020436-113	2-way FXO voice module	4	RM3-2FXO	
MP020436-114	4-way FXO voice module	4	RM3-4FXO	
MP020436-117	4-way ISDN U PORT MODULE	4	RM3-4U	Being researched
MP020436-118	8-way ISDN U PORT MODULE	4	RM3-8U	Being researched
MP020436-119	30-way frequency band 336MODEM module	4	RM3-30M336	Being researched
MP020436-120	Hardware encryption module	1	RM3-ENC	State authentication

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