

DX-3845-i Modular Router



DX-3845-i routers are modular aggregation routers with a high performance engine that meet the requirement of interoperability and deliver concurrent services at 600Kpps packet forwarding rates. These enterprise-level modular multifunctional security routers with high port-density, high-reliability and high-performance, can serve as a security access platform of multiple services, such as data, video and voice. DX-3845-i routers support four Network Module slots, and also support the simultaneous access of multiple WAN interfaces.

DX-3845-i router is ideally suited for data aggregation across all vertical segments. DX-3845-i has a complete modular design, control card, hot pluggable power supplies and fan modules are detachable from DX-3845-i chassis. This enables DX-3845-i router to provide great scalability and flexibility. DX-3845-i supports the software engine control cards with Giga Ethernet ports. The software engine, which runs on DX-3845-i provides users with powerful functions, provides backup solutions based on backup center and VRRP, rich QoS and network security features including VoIP and IP multicast protocol, and providing high performance/price ratio.

DX-3845-i router provides a comprehensive network solution across vertical segments and medium-to-large-sized enterprises. Each module of DX-3845-i router thoroughly complies with corresponding network standards. This ensures the router can interconnect with other manufactures' products at different levels and customer's investment is protected.

Features and Benefits:

- IPv6 support
- High performance/price ratio
- High-density modular design
- Hardware encryption with stateful authentication
- Construction of VPN network around DX-3845-i platform as hub
- Multiple levels of resiliency and redundancy
- High degree compatibility
- Complete QoS
- Hierarchical/distributed network management
- IPSec Capability
- 19" Rack mountable
- Redundant power supply

Product Configurations:

Model	Console Port	Network module slot	Power module slot	Fan slot	Control card slot	Aux Port
DX-3845-i	1	4	2	1	1	1

Product Characteristics

High performance mid- end routers:

DX-3845-i router tightly integrates the high-performance communication processor and software to deliver wired rate throughput of 600Kpps~1.2Mpps on all interfaces, thereby offering the best price-performance in its category.

High-density access ports :

DX-3845-i has control card with 2# 10/100/1000T ports shared with 2 # Giga SFP ports. DX-3845-i can support up to 16 # 2 M Synchronous serial ports , 2 # gigabit Ethernet ports, 16 # ISDN BRI U access, 16 # E1 and CE1/ISDN PRI access and 64 # Asynchronous port access. Moreover, DX-3845-i router can provide OC-3 ATM module for high-speed uplink and is about to support OC-3 CPOS module. This will enhance DX-3845-i application space all round; strengthen DX-3845-i aggregation ability.

Telecom Grade features:

To ensure stable operation, DX-3845-i router supports dual power supply hot standby, solutions, such as AC hot standby can adapt to different environment requirements.

The combination of VPN construction and built-in firewall

With the development of Internet application, security network architecture has become one of the key requirements of network deployment. DX-3845-i router supports PPTP, L2TP and IPSEC all of which can be adopted to construct different types of VPNs from layer-2 to layer-3. Without hiring expensive private lines, an enterprise can, through Internet, adopt Intranet VPN, instead of private lines or other connection modes, to connect with its network nodes. The construction and configuration of VPN is very simple, and the integration design makes the subscribers migrate to the secure VPN mode easily.

Additionally, DX-3845-i IOS has a integrated firewall which supports high-level security features, such as ACL packet filtering, NAT, authentication audit, route verification, Callback and DoS defense. The users can select different security policies to avoid attacks from external network.



Supporting Rich QoS to ensure the service quality of key data

QoS is the basic requirement of future IP network. To meet different demands of the users, DX-3845-i router can provide IntServ (Integrated Services) and DiffServ (Differentiated Services), CAR (committed access rate) and queuing strategies (such as PQ, FIFO, CQ, FQ, CBWFQ and LLQ etc.) So that, the quality, reliability and efficiency can be ensured for data voice and video services.

Hardware Specifications:

Model No	DX-3845-i
Performance Parameter	
Processor	833Mhz MPC8540
Flash	Default: 32MB expandable to 96MB
Memory	Default 512, expandable to 1GB DDR
Throughput	600Kpps
Physical Index	DX-3845-i
Dimension	445mm×410mm×118mm
Power requirements	
Power supply	Input Voltage AC: 100-240V; Frequency:50~60Hz.
Power consumption	Less than 150W
Environmental Parameters	
Short-term operational temperature	0~40
Long-term operational temperature	15~30
Short-term Relative humidity	10~90%, Non-condensing
Long-term Relative humidity	40~65%, Non-condensing

Technical Specifications:

QoS	<ul style="list-style-type: none"> Selective Packet Discard Random Early detection Weighted Random Early detection (WRED) Committed Access Rate (CAR) First Input & First Output (FIFO) Weighted-Fair Queue (WFQ) Class-Based Weighted Fair Queue(CBWFQ) Priority Queue (PQ) Custom Queue (CQ) Policy based routing
Security	<ul style="list-style-type: none"> Password Protection Standard and Extended ACLs Time Based ACL Authorization & accounting (PAP/CHAP, RADIUS) Network Address Translation (NAT) IP packet filtering L2TP GRE tunneling

	MD5 Authentication SSH v 1 and 2
Enhanced Security	Encryption (40bit & 56bit pay load) IPSec DES (64 bits) / 3DES (192 bits) / AES (128 /196 /256) 50K concurrent sessions
WAN Optimization	Bandwidth on Demand Dial Back Up Dial On Demand Call Back Data Compression Queuing Traffic Prioritization Inactivity Timeouts Spoofing Unicast Reverse Path forwarding Filtering DDR TCP Header compression TCP payload compression TCP Selective Acknowledge Frame Relay Per PVC compression Load balancing Filtering Snapshot Routing
Standards	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.1Q tagged vlan IP - RFC 791, 1812 PPP - RFC 1334, 1570, 1661, 1662, 1663, 1962, 1967, 1968, 1969, 1970, 1978, 1990, 1994, 2125, 2433 MLPPP – RFC 1990 TCP – RFC 793, 2001, 1323 UDP – RFC 768 ICMP – RFC 792 IGMPv2 – RFC 2236 IGMPv3 – RFC 3376 ARP – RFC 826 RARP(inverse ARP) Proxy ARP RIP v1/v2 – RFC 1058, 2453 OSPF – RFC 2328, 1583, 1587, 1793, 2370 BGP4 – RFC 1771 RTP – RFC 1889, 1890, 2833 RTCP – RFC 1899 CHAP – RFC 1994 Radius – RFC 2138, 2139, 2865, 2866 NAT – RFC 1631 SLIP - RFC 1490 L2TP – RFC 2661 GRE – RFC 2890 VRRP – RFC 2338 SNTP – RFC 1769

	<p>Telnet – RFC 856, 857 IPSec/IKE – RFC 2401~ 2412, 2104, 2451, 2857, 3602 PKI – RFC 2459, 2510, 2511 PPPoE - RFC 2516 SNMP v1 – RFC 1157 SNMP v2 – RFC 1441, 1213, 1155, 1157, 1910, 1450, 2263 DHCP Server – RFC 2131 Frame Relay MIB – RFC 1315</p>
Protocols	<p>Frame Relay SDLC LLC2 QLLC HDLC X.25 ISDN DNS DLSN</p>
Routing Protocols	<p>Static Route, dynamic route RIP V1 /V2 OSPF V2/v3 On Demand OSPF BGP4 DDR</p>
Redundancy Protocol	<p>VRRP (Virtual Router Redundancy Protocol)</p>
Multicast Routing Protocols	<p>IGMP v1/v2 PIM-SM , PIM-DM DVMRP</p>
IP address configuration	<p>IP sub interface configuration Sub Networking CIDR (Classless Inter-Domain Routing) IP un-numbered Easy IP Port based VLAN Tagged VLAN – IEEE 802.1Q Transparent Bridging</p>
Traffic Regulation	<p>Standard access control list to filter IP packets according to the source addresses in their IP packet headers Extended access control lists to filter IP packets according to fields in IP, UDP, TCP, ICMP and IGMP headers</p>
Trouble Shooting and Maintenance	<p>TFTP firmware upgrade Debugging Tracing of route packets Display of every interface Statistics about the health and the amount of traffic Syslog</p>
Management	<p>Simple Network Management Protocol (SNMP) Telnet Local management through router's console port[CLI] DHCP server RMON</p>


Ordering Information:

DAX PRODUCT CODE	Description
Dax DX-3845-I	Modular Router with 2# 10/100/1000T/Giga SFP ports, 4NM/Voice slots , one console port, one Aux Port, 600Kpps performance, 32MB Flash upgradeable to 96MB, 512MB DD upgradeable to 1 GB DDR, 1 AC power supply loaded, additional free slot for RPS
Dax DX-3845-I-AC-RPS	AC power supply module. DX-3845-i chassis can simultaneously support two power modules for backup mutually.
NM-2FE-TX	2 Port 10/100 Base TX module
NM-2HAS	2-Port high speed Synchronous serial Module
NM-4HAS	4-port high speed Synchronous serial module
NM-8A	8 Port Asynchronous Module
NM-16A	16 Port Asynchronous Module
NM-2CE1	2-port Channelized E1 module
NM-4CE1	4-port Channelized E1 module
NM-1B-U	1-Port ISDN BRI-U Module
NM-4B-U	4-Port ISDN BRI-U Module
NM-4FXS	4 Port FXS Voice Module
NM-4FXO	4 Port FXO Voice Module
NM-8FXS	8 Port FXS Voice Module
NM-1CPOS	1 Port – 155M CPOS Module without SFP Transceivers
SDH155-SFP-SH1-MM850-1.0	155M CPOS SFP Transceiver, MM(850nm, 1km, LC)
SDH155-SFP-SH15-MM1310-1.0	155M CPOS SFP Transceiver, MM(1310nm, 15km, LC)
SDH155-SFP-SH40-MM1310-1.0	155M CPOS SFP Transceiver, MM(1310nm, 40km, LC)
SDH155-SFP-SH80-MM1550-1.0	155M CPOS SFP Transceiver, MM(1550nm, 80km, LC)
AIM-VPN II	2nd Generation Hardware Encryption Module
Dax DX-3845-I- RAM -512M	512 MB RAM for DX-3845-i
Dax DX-3845-I- FLASH-64	64MB Flash for DX-3845-i

Dax DX-3845-I router is brought to you by Dax - An Apcom Company, India's renowned and technically qualified IT Vendor. Dax has over 30 Technical Support Executives across the country at Distributor outlets for Pre-post techno-commercial assistance. Dax offers a diverse product range that is extremely Indian market savvy and of high international quality. Over the past decade, Dax has strong forays in the field of networking, and with an efficient country wide channel of over 500 solution providers and 5000 resellers, more than 2 million networking products are in use and continue to be sold nationally.

Dax is synonymous with consistent quality, performance, business ethics and our support supercedes MNC commitments hands down. Dax has been ranked amongst Top 3 Networking products in IMRB's Channel satisfaction survey for the year 2002. Our strong presence bears testimony to years of commitment, quality and service, spearheading Dax's success through time.

Other Dax Offering

Access	Connectivity	
Routers Wireless LAN Extenders VoIP IVRS & CTI	Switches Cabling Interface Converters & Modems Media converters RAS & Serial I/O	 Go Placidly Dax Networks Limited 79, Chamiers Road, Chennai – 600 028 Ph: 044-2432 3558 Fax: 044-2435 7267 E-mail: contact@daxnetworks.com Website: www.daxnetworks.com An Apcom Company