The Cisco 7200VXR and 7301 SERIES ROUTERS

Cisco's 7200VXR Series routers deliver outstanding versatility in a compact form factor; they are particularly suitable for applications that require Gigabit Ethernet and OC-3/STM-1 Packet over SONET (POS) connectivity with exceptional IP services performance. Offering packet-processing speeds of up to one million packets per second, three built-in Gigabit Ethernet ports on the routing engine, a huge range of port-adapter options, and unparalleled modular support of sophisticated IP services capabilities, the Cisco 7200VXR is an ideal high-end branch-office aggregation router.

The latest generation of integrated services routers such as the Cisco 1800, 2800, and 3800 series platforms enable the deployment of sophisticated communications services and applications even in the smallest of remote offices. However, the ultimate success of such deployments and their operational depend on the installation of an efficient and scalable system at the network aggregation points. The Cisco 7200VXR is ideally suited to meet this challenge and deliver these applications transparently.

A primary strength of the Cisco 7200VXR is its modularity and flexibility. It offers a choice of 6-, 12-, or 24-slot chassis, a selection of processors providing up to 1 Mbps, an extensive range of LAN and WAN interfaces, and single or dual power supplies, helping enable customers to customize their systems to achieve desired levels of performance, connectivity, and capacity. The Cisco 7200VXR Series is typically deployed for general enterprise WAN aggregation, voice over IP (VoIP), security, and various other IP applications because of its enterprise WAN aggregation, voice over IP (VoIP), security, and various other IP applications because of its

- Dynamic Multipoint VPNs Greatly Simplify the Creation and Management of Stereo Shari Encrypted (MPLS) Services
- The Cisco 7301 Delivers High-Speed Internet Connectivity with the Cisco 7200VXR and Cisco 7301 is provided by port adapters that are inserted into dedicated slots within the chassis. Different port adapters can be combined to match precisely the connectivity requirements based on the cost and availability of carrier services.

- Connectivity options for the Cisco 7200VXR and 7301 include:
  - Increased downstream performance (VAM2+), the Cisco 7301 and Cisco 7200VXR Series VPN router Active IP Security (AIPS) exception availability to 250 Mbps for the most demanding bandwidth and site-to-site VPN deployments.

- Enhanced Security
  - The security capabilities of the Cisco 7200VXR and Cisco 7301 include support for a fully featured internet firewall, intrusion prevention, access control lists (ACL), and IPS. The Cisco IOS® Software’s firewall and intrusion prevention system (IPS) enables the network to prevent most common and emerging threats.

- Flexibility and Modularity
  - A rapidly developing global commercial environment means that enterprises and organizations need solutions that can both fit their operation and help them build toward the emerging demands of the future. To meet these challenging requirements, the Cisco 7200VXR flexes a tremendous variety of features and connectivity options that provide exceptional deployment flexibility.

- Cisco 7200VXR and 7301 Series Specifications

- Real-Life Protocols
  - BGP, OSPF, IS-IS, and EIGRP
  - PPP, HDLC, LAPB, and Frame Relay
  - IP Packet Forwarding
  - Multiple WAN Services (ATM, Frame Relay, T1, E1)

- Distributed Software
  - Cisco IOS® Software (v12.0)
  - Bootable Flash
  - Remote Access
  - Dynamic Host Configuration Protocol (DHCP)

- Management
  - Remote Access
  - CLI, Telnet, SSH, and SNMP
  - Security
  - 128-bit AES encryption

- Profiles
  - Load Balancing
  - Quality of Service (QoS)
  - Traffic Engineering

- Power Supply
  - Redundant AC or DC power supplies
  - Hot-swappable modules

- Hardware Features
  - Dual redundant power supplies
  - Dual redundant fan trays

- Interface Types
  - Gigabit Ethernet
  - 10/100/1000 Ethernet
  - Serial Interfaces (RS-232, RS-422, RS-449)

- Storage
  - CompactFlash storage
  - Hard disk drives (HDD)

- Expansion Slot
  - 6, 12, or 24 slots

- Form Factors
  - 1U, 2U, 4U

- Dimensions (W x H x D)
  - Cisco 7200VXR: 19 x 15 x 17.3 in. (48 x 38 x 44 cm)
  - Cisco 7301: 19 x 17.5 x 17.5 in. (48 x 44.5 x 44.5 cm)

- Weight
  - Cisco 7200VXR: 70 lbs (32 kg)
  - Cisco 7301: 100 lbs (45 kg)

- Cisco 7200VXR and 7301 Port-Adapter Support

<table>
<thead>
<tr>
<th>Port Adapter</th>
<th>Description</th>
<th>Cisco 7200VXR</th>
<th>Cisco 7301</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Channel Port-Adapter</td>
<td>2-port multi-channel T1/E1 with CSU/DSU</td>
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- Connectivity options available for the Cisco 7200VXR and 7301 include:
  - Ethernet at 10 Mbps, 100 Mbps and 1 Gbps rates
  - SONET (OC-3c/STM-1)
  - Frame Relay
  - High-Speed Serial Interfaces (HSSI)
  - ISDN (PRI, FR, BRI)
  - Digital Voice
  - Ethernet (10/100/1000)
  - SDH (SONET/SDH)
  - POS (OC-3c/STM-1)
  - STM-1/STM-4

- Cisco 7200VXR and 7301 Features

- Security
  - Stateful firewall; intrusion prevention system (IPS); access control lists (ACL)
  - Network Address Translation (NAT)
  - AAA (Authentication, Authorization, Accounting)

- Performance
  - Throughput of up to one million packets per second
  - Support for up to 1 Mbps

- Feature Highlights
  - Dynamic Multipoint VPNs (DMVPNs)
  - Multicast
  - MPLS
  - IPSec
  - QoS
  - Traffic Engineering

- Application Capabilities

- Multiprotocol Label Switching (MPLS)
- Provider backbone
- Edge functions, MPLS virtual private networking (MPLS VPN, MPLS)