Tel: +44 (0)1279 408 777
Email: sales@gocomsys.com
Website: www.gocomsys.com

# Refurbished CISCO EPA-GE-FE-BBRD Datasheet

CISCO > ROUTERS

## Cisco XR 12000 Series Router

## Product Features

| | |
|---|---|
| **Performance** | Line-rate throughput for IP forwarding and MPLS switching<br>Dedicated Layer 3 forwarding engine that provides line-rate throughput for all Ethernet frame sizes<br>Sustained performance in fully loaded system<br>Sustained performance for all IP prefix sizes<br>No performance drops as QoS, accounting features, committed access rate (CAR), and access control lists (ACLs) are enabled |
| **Reliability and Availability** | Online insertion and removal (OIR), enabling insertion and removal of line cards and SFP modules without impacting traffic |
| **Network Management** | Cisco IOS ® Software command-line interface (CLI)<br>Cisco 12000 Manager for configuration, fault, and performance element management<br>Simple Network Management Protocol (SNMP) |
| **Protocols** | Layer 3 routing protocols: Border Gateway Protocol Version 4 (BGPv4), Open Shortest Path First (OSPF), Intermediate System-to-Intermediate System (IS-IS), Enhanced Interior Gateway Routing Protocol (EIGRP), Routing Information Protocol (RIP), Distributed Forwarding Information Base (FIB) IP switching, Cisco Discovery Protocol, Internet Control Message Protocol (ICMP), Routing with Resource Reservation (RRR), and others<br>Multicast forwarding with support for source and shared distribution trees and the following protocols: Protocol Independent Multicast-dense mode (PIM-DM); PIM-sparse mode (PIM-SM); Internet Group Management Protocol Versions 1 and 1 (IGMPv1/v2); Cisco Group Management Protocol (GMP); Multiprotocol Border Gateway Protocol (MBGP); Multicast Source Discovery Protocol (MSDP); and others<br>Comprehensive MPLS support<br>Traffic engineering using RRR |
| **IP and MPLS Traffic Engineering (MPLS TE)** | IP and MPLS load balancing<br>MPLS, VPN mapping, and Ethernet over MPLS (EoMPLS) |
| **Statistics and Accounting** | Byte and packet counting per ingress port for IP and MPLS packets<br>Packet counting for Modified Deficit Round Robin (MDRR) and Weighted Random Early Detection (WRED)<br>Sampled NetFlow (v5 and v8) |
| **Security** | 15,000 xACLs in the ingress side per port and per VLAN; 20,000 entries on ingress and egress at line rate supported on 4-port GE ISE line card<br>1024 ACLs on the egress side on per-port basis |
| **QoS** | 8 queues per port, WRED and MDRR per port and queue<br>Rate limiting on the ingress and egress side<br>Traffic shaping on the egress side |
| **Ethernet** | 802.1q VLAN support, 1024 VLANs, and jumbo frames<br>Source and destination MAC accounting and VLAN accounting |
| **Cisco IPv6** | Provider edge router without compromising performance (supported on 4-port GE ISE line cards) |

## Compliance and Agency Approvals

| | |
|---|---|
| **Environmental** | Operating temperature: 41 to 104°F (5 to 40°C)<br>Operating temperature (short-term): 23 to 131°F (-5 to 55°C)<br>Storage temperature: -4 to 149°F (-20 to 65°C)<br>Relative humidity:<br>5 to 85%, noncondensing, operating conditions<br>5 to 90%, noncondensing, operating conditions (short-term)<br>Up to 95%, noncondensing, nonoperating conditions<br>Operating altitude: -60 to 4000m |
| **Safety** | UL 1950<br>CSA 22.2-No. 950 |

| | |
|---|---|
| | EN60950<br>IEC 60950 CB Scheme<br>ACA TS001<br>AS/NZS 3260<br>EN60825/IEC60825 laser safety (supported on 1-port 10-GE line card)<br>FDA-Code of Federal Regulations (USA) laser (supported on 1-port 10-GE line card) |
| **EMI** | FCC CFR 47-Part 15 1998 Class A<br>ICES 003 Class A<br>AS/NRZ 3548 Class A<br>EN55022 Class B (up to 1 GHz)<br>VCCI Class A<br>CISPR 22 Class B (up to 1 GHz)<br>BSMI/CNS 13438: 1997 Class A<br>IEC-1000-3-2 Power line harmonics<br>IEC 61000-3-3 Voltage fluctuations and flicker |
| **Immunity (Basic Standards)** | IEC-1000-4-2 ESD (8-kV contact, 15-kV air)<br>IEC-1000-4-3 Radiated immunity (10 V/m)<br>IEC-1000-4-4 EFT (2-kV power port, 1-kV signal port)<br>IEC-1000-4-5 Surge AC port (4-kV CM, 2-kV DM)<br>IEC-1000-4-5 Surge Signal port (2-kV CM, 1-kV DM)<br>IEC-1000-4-5 Surge DC port (0.5-kV CM, 0.5-kV DM)<br>IEC-1000-4-6 Low Frequency Conductive Immunity, (10V)<br>IEC-1000-4-11 Voltage dips and sags<br>EN55024\CISPR24 ITE Immunity |
| **ETSI and EN** | EN 300 386 |
| **Network Equipment Building Standards (NEBS)** | This product is designed to meet the following requirements:<br>SR-3580-NEBS criteria levels (Level 3-compliant)<br>GR-1089-Core-NEBS EMC and safety<br>GR-63-Core-NEBS Physical protection |

# The next steps...

**ORDER NOW**

**VIEW ONLINE**

**Tel: +44 (0)1279 408 777**

**Email: sales@gocomsys.com**

**Website: www.gocomsys.com**