



CRAT-100/CRDT-100 TERABIT ROUTER



Large enterprises, service providers and data centres need aggregation devices to manage the explosive growth in network traffic due to mobility, cloud networking, voice / video services and distributed / collaborative work environment. An aggregation router/L3 switch can consolidate traffic streams coming from various LAN/WAN networks and help in maintaining consistent performance among its various sites, LAN segments and cloud locations.

The recent and rapid expansion of remote work, digital collaborative solutions, and multi-cloud environments has heightened the need for efficiently managing network traffic and application performance. So, the aggregate switching fabric needs to be upgraded to handle about 1 terabit per second kind of data traffic in the aggregation layer.

C-DOT's CRAT-100/CRDT-100 is an IP/MPLS router for addressing the challenges faced by service providers, enterprises and data

centres at the access and aggregation network. It supports a flexible port configuration where-in each of its port can be either configured as 1G optical/electrical or 10G optical. Moreover, depending on the site requirements, each port can be equipped with short-haul or long-haul interface optics.

The product is compliant to environmental standards (QM333), EMI/EMC standards (CISPR32 Class A, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4 IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-11, IEC 61000-4-29 and safety standards (IEC 60950-1).

C-DOT's CRAT-100/CRDT-100 is the first and only indigenous Router that has been certified for Evaluation Assurance Level-3 (EAL-3) of the Common Criteria for Information Technology Security Evaluation, which is an international standard (ISO/IEC 15408) for Computer/IT product security certification. Also, the Router is IPv6 ready logo and ER Certified by Telecom Engineering Centre(TEC).

Product Features and Specifications

- Switching Fabric Capacity
 - ✓ 960Gbps
- Network Interfaces
 - ✓ 48x10G Optical or 1G Electrical/Optical Ethernet
- Redundancy
 - ✓ 1 + 1 for Power Supplies
 - ✓ Link Aggregation (L2)
 - ✓ ECMP (L3)
 - ✓ VRRP
 - ✓ MC-LAG
- Protocols supported
 - ✓ IPv4
 - ✓ IPv6
 - ✓ MPLS
- Routing and Signalling Protocols
 - ✓ OSPF
 - ✓ BGP/MP-BGP
 - ✓ IS-IS
 - ✓ RIP
 - ✓ BFD
 - ✓ LDP
 - ✓ RSVP-TE
 - ✓ MPLS OAM
 - ✓ Multicast
 - PIM-SM
 - PIM-SSM
 - PIM-DM
 - ✓ Virtual Routing & Forwarding
 - ✓ PBR
- L2 Features
 - ✓ Spanning Tree (STP/RSTP/MSTP)
 - ✓ VLAN
 - ✓ LLDP
 - ✓ Integrated Router and Bridging
 - ✓ Jumbo Frames
- QoS Support
 - ✓ DiffServ and IEEE 802.1p QoS
- ✓ L2,L3,L4 based Classification
- ✓ srTCM, trTCM
- ✓ Shaping
- ✓ Strict Priority, WRR
- ✓ 8 queues per port
- Security
 - ✓ Access Control Lists
 - ✓ Authentication
 - ✓ Rate Limiting
 - ✓ Storm Protection
 - ✓ RADIUS/TACACS+
 - ✓ DHCP Relay
 - ✓ DNS Resolver
- VPN
 - ✓ MPLS L3 VPN and L2 VPN (VPWS)
- Monitoring
 - ✓ Port Mirroring
 - ✓ RMON
- Management
 - ✓ In-band management
 - ✓ Out of Band management Interface
 - ✓ System Monitoring
 - ✓ Logging
 - ✓ SSH, SFTP, SCP
 - ✓ SNMP V1/V2/V3
 - ✓ User Management (AAA)
 - ✓ NTP
 - ✓ Remote Software Upgrades
- User Interfaces
 - ✓ CLI
 - ✓ GUI based monitoring system
- Power Supply (1+1 redundant)
 - ✓ 220V AC (CRAT-100)
 - ✓ -48V DC (CRDT-100)
- Dimensions (W x D x H)
 - ✓ 432.2 mm X 595 mm X 85.8 mm



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