



NIPUN-20 Branch Router



Product Highlights

- Indigenously designed
- 20Gbps throughput
- Dedicated IPsec / MACsec Hardware engines
- Network Ports : 16 X 1G + 4 x 10G
- Support for low profile PCIe add-in-card
- SyncE/PTP support
- 1U, 19" Rack compliant chassis
- Hot swappable fan tray with n+1 redundancy
- Hot swappable redundant PSUs
- 230V, 50Hz AC

Product Features and Specifications

C-DOT Branch Router (NIPUN-20) is a high-performance customer edge router which can address the requirements of small offices and business units, typically having LAN/WAN interfaces to deliver integrated switching and routing features. On the WAN side, the router provides support for 4 x 10G Gigabit Ethernet optical interfaces. It provides the support for 16 x 10/100/1000M Ethernet/Fast Ethernet /Gigabit Ethernet interfaces, on the LAN side. It can provide a throughput upto 20Gbps. It has dedicated Layer 3 and Layer 2 encryption engines. The system supports IEEE 1588v2 PTP and SyncE timing besides support for NTP timing. It supports Hardware Root of Trust using an external TPM and has support for authentication key.

It is based on a versatile hardware designed to support various kind of features and protocols required in an IP network. The modular OS supports a wide range of routing protocols such as OSPF, RIP, BGP, ISIS and Management features along with built-in security features (IPsec, ACL) to protect the network and device access. It also supports ESTI GS QKD 014 standard for fetching Cryptographic keys for IPsec communication. It supports various Layer 2 features e.g. VLAN, etc. It also supports jumbo frames. The Router also supports SNMP-v1, v2, v3 protocol and can also be managed through an EMS/NMS.

It is packaged in a compact size (1U, 19" rack compatible) and shall have forced air cooling and hot-swappable fans in n+1 redundancy. The System shall have option for 1 + 1 redundant and hot swappable 230V AC PSUs.

Network Interfaces

- 16 x 1G Ethernet (Electrical)
- 4 x 10G Ethernet over Optical Fiber (SFP+)

System Interfaces

- 01 x USB2.0 Console port
- 02 x USB3.0 Type A ports
- Telco interface for supporting Audio/Buzzer indication
- Mate interface for exchange of Health status for smooth and fast switchover
- Support for Low Profile PCIe 3.0 Add-In Card

Memory

- Support for 16GB/32GB DDR5 SO-DIMM
- Support for 32GB/64GB eMMC

Protocols supported

- IPv4
- IPv6

Routing Protocols

- Static
- OSPF
- RIP
- BGP
- ISIS

Environmental Range

Parameter	Specification
Operating Temperature	0°C to +50°C
Operating Humidity	10% - 85% non-condensing

Certification

EMI/EMC	CISPR 32 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
Environmental	QM333
IT Equipment Safety	IS/IEC 62368-1: 2018

Security Features

- ACL
- IPSec (AES/DES/3DES)
- SSH v2
- ESTI GS QKD 014

Management

- In-band management
- SNMP-v1,v2,v3
- CLI

Power Supply

- 230V AC Hot swappable Redundant power supplies

Cooling/Thermal

- Intelligent Forced air cooling
- Temperature sensor based fan speed control
- Hot swappable Fans in n+1 redundancy
- Field replaceable Air filter

Dimensions

- 1U x Standard 19-inch rack mountable, Depth 12.5"

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