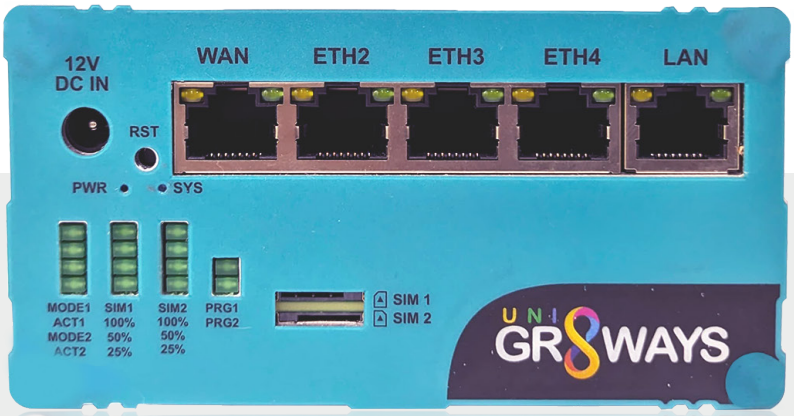
Cnergee
Secure by design

GR8-52S
SPECIFICATION



Copyright © 2025 | Cnergee Technologies Private Limited

Overview

Cnergee SD-WAN platform is built upon a three-tiered, secure-by-design architecture comprising of the **Customer Premises Equipment (CPE), the Concentrator, and the Orchestrator.** This structure ensures high performance, centralized control, and deep security for distributed enterprise networks.

1. Customer Premises Equipment (CPE) / Appliance Family

Cnergee CPE devices are the intelligent edge appliances deployed at each branch office or remote site. They are the primary enforcement point for all networking and security policies.

- **Product Variants:** Cnergee offers a family of eight different CPE variants, with the most common and scalable models being GR852S, N86, N8616, N8616 SFP, and N86Z20.

- **Feature Progression:** Each model provides an increasing level of features and performance, scaling from basic stateful firewall capabilities on entry-level units to robust data center-grade firewalls with high throughput on the premium appliances (e.g., N86Z20).

- **Unique PMTA Core:** Regardless of the model, every Cnergee CPE utilizes the company's patent-applied **Packet wise Multi-session Tunnel Aggregation (PMTA)** technology. This allows the CPE to aggregate multiple disparate WAN links (MPLS, Broadband, LTE/5G) at the packet level for true bandwidth addition, low latency, and seamless failover.

- **Decoupled Operation:** Cnergee solution offers deployment flexibility. It can be used without the Concentrator and full SD-WAN tunnel mesh, where the CPE primarily functions as a WAN link aggregator via PMTA and a robust firewall (stateful or next-generation, depending on the model).

Copyright © 2025 | Cnergee Technologies Private Limited

2. Concentrator (Gateway/Hub)

Concentrator serves as the centralized termination point for all encrypted SD-WAN tunnels from the remote CPEs.

- **Use Case:** Concentrator is essential at any central location where private applications and services are hosted (e.g., the corporate data center, a private cloud VPC, or the headquarters). It acts as the secure gateway that grants branches access to these internal resources.

- **Deployment Flexibility:** Cnergee supports deployment of the Concentrator as both a dedicated appliance for maximum performance and a Virtual Machine (VM) for software-defined environments and cloud deployments, accommodating diverse customer IT strategies.

3. Orchestrator (Management Plane)

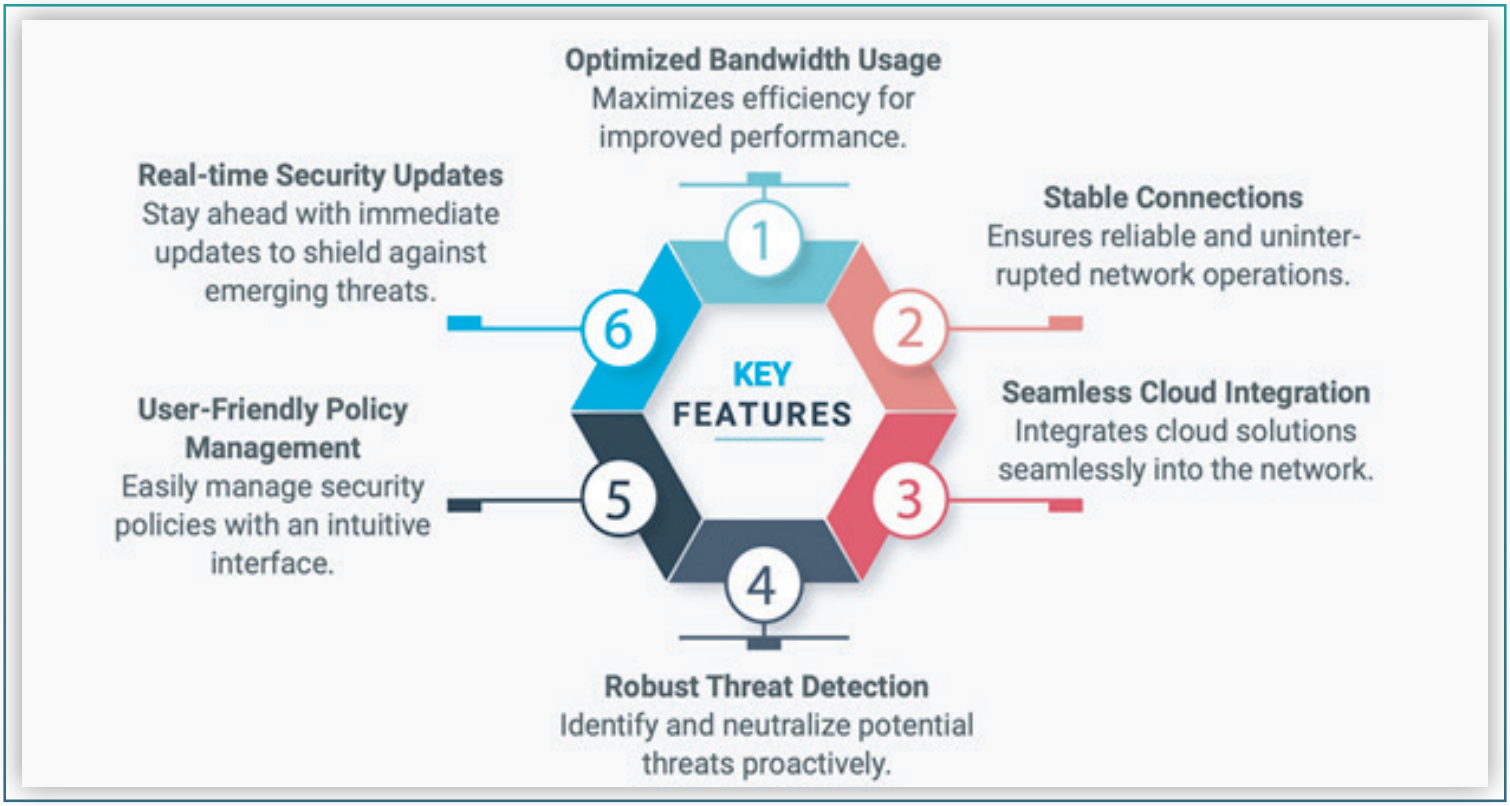
Orchestrator is the centralized management and control plane for the entire SD-WAN fabric.

- **Primary Function:** It handles all non-data plane functions, including Zero-Touch Provisioning (ZTP), policy configuration, monitoring, and network-wide analytics from a single pane of glass. It determines the business intent and pushes the necessary policies to the Concentrators and CPEs.

- **Deployment Model:** Cnergee Orchestrator is designed to be multi-tenanted and cloud-based by default, offering rapid deployment, high availability, and easy scalability.

- **On-Premises Option:** For enterprises with strict regulatory requirements, data sovereignty concerns, or complex Operational Technology (OT) environments, Cnergee supports on-premises deployment of the Orchestrator.

Copyright © 2025 | Cnergee Technologies Private Limited



Variants & Supported Features

- PMTA™ Tunnel
- Domain Based Tunnels
- LAN-WAN Virtulization
- Application Aware Routing
- Micro-Segmentation of LAN
- Stateful Firewall
- SSL VPN
- Domain filter
- Application Filter
- Centralized Orchestration
- Reports & Analytics

Port Config

1 Gbe Ports	5
SIM Slots	2
RAM	512 Mb

Copyright © 2025 | Cnergee Technologies Private Limited

Supported Throughputs

Basic Firewall Throughput (Stateless/L3/L4)	Upto 1 Gbps
Concurrent Sessions (TCP)	Upto 2,000
New Sessions/Second	500
SDWAN Throughput (AES256-SHA256)	Upto 25 Mbps
Concurrent Users supported	30-50





Proudly
MADE IN INDIA

Copyright © 2025 | Cnergee Technologies Private Limited

Cnergee

Secure by design

Contact Us:

info@cnergee.com

+91 22 613 77777

S-10, Arenja Towers, Sec-11,
CBD Belapur, Navi Mumbai, India - 400614

www.cnergee.com

For more Updates, Follow Us

Copyright © 2025 | Cnergee Technologies Private Limited