



Cradlepoint Branch Solution Sizing Guide




Overview

Cradlepoint NetCloud Solution Packages offer complete networking and security services. Performance will vary depending on the services enabled.

This sizing guide is designed to help determine which routing platforms are best suited for common use cases based on performance and the features enabled.

Choosing the right device:

The chart below outlines the properties of the routers available in Cradlepoint Branch Routing and Performance Branch Routing Solution Packages:

	 AER16x0	 AER2200	 CR4250
Supports LTE-Advanced	Yes, 300Mbps	Yes, 600Mbps	Optional with CBA850
Cloud Management	Yes	Yes	Yes
NetCloud Perimeter	Yes	Yes	Yes
Zone-Based Firewall	Yes	Yes	Yes
Cradlepoint Secure Web Filtering (CPSWF)	Yes	Yes	Yes
Cradlepoint Secure Threat Management (CPSTM)	Yes	Yes	Yes
Ports (LAN/WAN switchable)	5 GigE	10 GigE	8 GigE & 2 SFP/SFP+
WiFi (Dual-band, dual concurrent a/b/g/n/ac)	Internal antennas, 2x2 MIMO	External antennas, 4x4 MIMO	Optional with AP22
Dual-Modem Support	1 embedded, 1 integrated*	1 embedded, 1 integrated	Optional with CBA850
WiFi as WAN	Yes	Yes	No
Rack Mount	No	Yes	Yes
Housing	Industrial Plastic	Metal	Metal
Processor	800 MHz dual-core	716 MHz, quad-core	X86 4-core CPU @2.2 GHz
Memory	256 MB	512 MB	8GB
Power over Ethernet (802.3at)	None	4 ports	8 ports

*LP6-M versions of the AER1600/AER1650 come with a single LTE-A capable modem. Dual modem operation is not supported.

Cradlepoint Branch Router Performance Guidelines

	AER1600	AER2200	CR4250 Ethernet WAN	CR4250 SFP+
Max Throughput with all security features enabled (Firewall, IPsec, CPSTM, CPSWF, App Analytics)	30 Mbps	30 Mbps	700 Mbps	800 Mbps
Max Throughput (Default Configuration)	900 Mbps	950 Mbps	1536 Mbps	5120 Mbps
Max Concurrent TCP Sessions	32,000	32,000	1,000,000	1,000,000
Max IPsec VPN Throughput	30 Mbps	30 Mbps	700 Mbps	800 Mbps
Max Concurrent VPN Tunnels	20	20	40*	40*
Max Throughput with CPSTM (IPS)	80 Mbps	150 Mbps	800 Mbps	800 Mbps
Max Throughput with CPSWF (Content Filter)	900 Mbps	950 Mbps	1536 Mbps	5120 Mbps
Max Throughput with App Analytics	80 Mbps	150 Mbps	800 Mbps	800 Mbps
Max Throughput with IPSEC + CPSWF	30 Mbps	30 Mbps	700 Mbps	800 Mbps
Max Throughput with IPSEC + App Analytics	30 Mbps	30 Mbps	700 Mbps	800 Mbps
Max Throughput with IPSEC + CPSTM + CPSWF	30 Mbps	30 Mbps	700 Mbps	800 Mbps
Max Throughput with IPSEC + CPSTM + App Analytics	30 Mbps	30 Mbps	700 Mbps	800 Mbps
Max Throughput with IPSEC + CPSTM + CPSWF + App Analytics	30 Mbps	30 Mbps	700 Mbps	800 Mbps
Max Throughput with CPSTM + CPSWF	80 Mbps	150 Mbps	800 Mbps	800 Mbps
Max Throughput with CPSTM + App Analytics	80 Mbps	150 Mbps	800 Mbps	800 Mbps
Max Throughput with CPSTM + App Analytics + CPSWF	80 Mbps	150 Mbps	800 Mbps	800 Mbps
Max Throughput with App Analytics + CPSWF	80 Mbps	150 Mbps	800 Mbps	800 Mbps

* Default Max Concurrent VPN tunnels upgradable with additional license coming soon

Test Methodology

Default configuration shipped with hardware includes NAT and standard stateful/zone firewall configuration. Throughput shown is bi-directional TCP traffic with less than a 1% packet loss using four wired clients. Number of clients is determined by amount of available memory during throughput testing. All testing completed on NCOS version 6.6.0

Number of Clients

Each customer deployment may have a different number of clients. The chart below includes the recommended maximum number of clients used in the test to achieve the throughput results. Exceeding these client counts may not be supported on the device and/or performance results may vary from the published results.

	AER16x0	AER2200	CR4250
Recommend Max Client Count	10 (5 with CPSTM or App Analytics enabled)	100	300