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NetCloud Branch Performance Complete Package with CR4250-1200M-B Spec Sheet

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The Cradlepoint NetCloud Branch Performance Complete Package with CR4250-1200M-B is an all-inclusive package that includes:

- Purpose-built endpoints for branch applications
- NetCloud Branch Essentials and Advanced Plans, tailored for branch networking, comprehensive configurations, and security, set for a specific term
- 24x7 support and limited lifetime warranty

What to Buy

NetCloud Branch Performance Complete Packages includes both an Essentials and Advanced plan, and contain all the features and capabilities required for small to mid-sized branch applications. This customized package includes 24x7 support (phone support: 24-hour weekdays with emergency response on weekends, web: 24x7, chat: 24x5), a limited lifetime warranty, Layer 7 visibility and control, and CP Secure Web.

See additional details of what is included in both the Essential and Advanced NetCloud software: cradlepoint.com/branch-networks

For more details on the NetCloud Branch Performance Complete Package with CR4250M-B, see below.

Description	Part Numbers
North America (U.S., Canada)	
— NetCloud Branch Performance Complete Package with CR4250-1200M-B PoE	BDx-425P120B-OON

x = 1, 3, or 5 years

What's in the Box

Purpose-built endpoints for branch applications

- CR4250-PoE Branch Router
- CBA850-1200-M-B LTE Adapter with the MC400 multi-carrier, modular modem
- Universal LTE antennas with dedicated active GPS antenna port
- 12V DC/1.5A power adapter (1.5-meter cord)
- Ethernet cable
- Mounting hardware
- C8 line cord
- Safety, Regulatory, and Warranty information
- Rubber feet (4) for desk mounting

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Key Features

WAN

- 8 10/100/1000 ethernet ports (WAN/LAN switchable)
- 2 SFP/SFP+ ports (WAN/LAN switchable)
- Smart WAN selection
- Failover/Failback
- Load balancing
- WAN PortSpeed control
- WAN/LAN affinity
- DynDNS
- Auto QoS
- QoS (DSCP and prority queuing)
- SD-WAN
- 1200M-B: LTE Advanced Pro 1.2 Gbps LTE/HSPA+ (SIM-based auto-carrier selection for all North American, European, and Asia Paific carriers)
- Advanced modem failure check
- IP Passhrough
- Standby

LAN

- 8 10/100/1000 Ethernet ports (WAN/LAN switchable); PoE version supports PoE on all ports for class I, II, III, or IV devices (125 W power budget).
- 2 SFP/SFP+ ports (WAN/LAN switchable)
- LLDP support
- VLAN 802.1Q
- DHCP server, client, relay
- DNS and DNS proxy
- Split DNS
- DynDNS
- UPnPDMZ
- MAC address filtering
- STP
- Unicast/Multicast proxy

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Management

- Cradlepoint NetCloud Manager (NCM)
- Real-time diagnostics/troubleshooting
- Remote connect / OOBM
- Secure remote cloud configuration
- GeoView location services
- Web UI, API, CLI
- NetCloud Perimeter gateway support
- Client and Traffic Visibility and Control
- SDK support
- Data Usage Alerts
- Advanced Troubleshooting (support)
- Device Alerts
- SNMP
- Console Port for OOBM

VPN & Routing

- IPsec Tunnel – up to 100 concurrent sessions
- IKEv2 support (includes MOBIKE)
- OpenVPN (SSL VPN)
- L2TP
- GRE tunnel
- OSPF/BGP/RIP
- Route filters (Access Control Lists, Prefix Filters, Route Maps, Communities for BGP)
- Policy-based routing
- Per-interface routing
- Static routing
- NAT
- NAT-less routing
- WAN affinity
- Virtual server/port forwarding
- VTI tunnel support
- DMNR
- IPv6
- VRRP
- STP
- NHRP

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Security

- RADIUS and TACACS+ support*
- 802.1x authentication for wireless and wired networks
- Zscaler Internet Security2
- Certificate support
- Application-level gateways
- MAC address filtering
- CP Secure Threat Management
- Advanced security mode (local user management only)
- IP filtering
- Content filtering

** Native support for authentication. Authorization and accounting support through hotspot/captive portal services*

2 Requires Zscaler Internet Security License

Specifications

The following features are delivered through the hardware.

WAN:

- 1200M-B Category 18 LTE Advanced Pro modem with (DC-HSPA+ failover)
- 8 10/100/1000 ethernet ports (cable/DSL/T1/satellite/ Metro Ethernet; WAN/LAN switchable)
- 2 SFP/SFP+ (WAN/LAN switchable)
- SD-WAN

LAN:

- 8 10/100/1000 ethernet ports (WAN/LAN switchable)
- 2 SFP/SFP+ (WAN/LAN switchable)

Temperature:

- 0 °C to 40 °C (32 °F to 104°F) operating
- -20 °C to 60 °C (-4 °F to 140 °F) storage
- Internal fans for reliable cooling

Humidity (non-condensing):

- 10% to 85% operating
- 5% to 90% storage

Processor: x86 4-core CPU @2.2 GHz with Intel Quick Assist Technology

Memory: 8 GB DDR4 ECC; 16 GB eMMC Flash

Size:

- CR4250: 13.2 × 8.3 × 1.8 in (335 × 210 × 45 mm)
- CBA850-1200M-B: 4.8 × 4.8 × 1.7 in (122 × 122 × 42 mm)

Certifications:

- Regulatory: FCC, CE, IC
- Safety: UL/CUL/CB Scheme
- Materials: WEEE, RoHS, RoHS-2, California Prop 65

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Performance

- Ethernet WAN
  - Max throughout (default configuration*): 950 Mbps
  - Max concurrent TCP sessions: 1,000,000
  - Max IPSec VPN throughput: 750 Mbps
- Recommended max client count: 300**
- SFP+
  - Max throughout (default configuration*): 2,000 Mbps
  - Max concurrent TCP sessions: 1,000,000
  - Max IPSec VPN throughput: 1,100 Mbps
  - Recommended max client count: 300**

** Default configuration shipped with hardware including NAT and basic stateful/zone firewall configuration.*

*** Cradlepoint defines client as any network connected device utilizing resources, such as bandwidth, on the local network.*

Performance testing was conducted based off requirements as defined in RFC2544 using a mix of 64, 256, and 1500-byte packet sizes. Throughput is shown as bi-directional TCP traffic with less than a 1% packet loss using four wired clients.

Specifications and information in this datasheet are subject to change without notice.

Accessories

- AP22 for WiFi support
- CR4250 Rack-Mount Brackets (Part # 170764-000)
- Qualified SFP/SFP+ modules from Finisar[1]
  - Gigabit SFP transceivers*
    - FTLF8519P3BNL - SFP -> 1000BaseSX Transceiver - Multi-mode fiber
    - FTLF1318P3BTL - SFP -> 1000BaseLX Transceiver - Single-mode fiber
  - 10 Gigabit SFP+ transceivers
    - FTLX8574D3BCL - SFP+ -> 10GBase-SR - OM-4 Multi-mode fiber
    - FTLX1471D3BCL - SFP+ -> 10GBase-LR - Single-mode fiber
    - FCBG110SD1Cxx - SFP+ Direct Attach Cable (DAC) - Lengths could be 1, 3 and 5 Meters
- DIN Rail Mounting Bracket (Part # 170656-000)
- Wall/Ceiling Mounting Bracket (Part # 170666-000)
- Cradlepoint Certified Antennas for Fixed Sites

1 Non-qualified SFP/SFP+ modules may function

** SFP: 1000baseTx transeiver not supported by any manufacturer*

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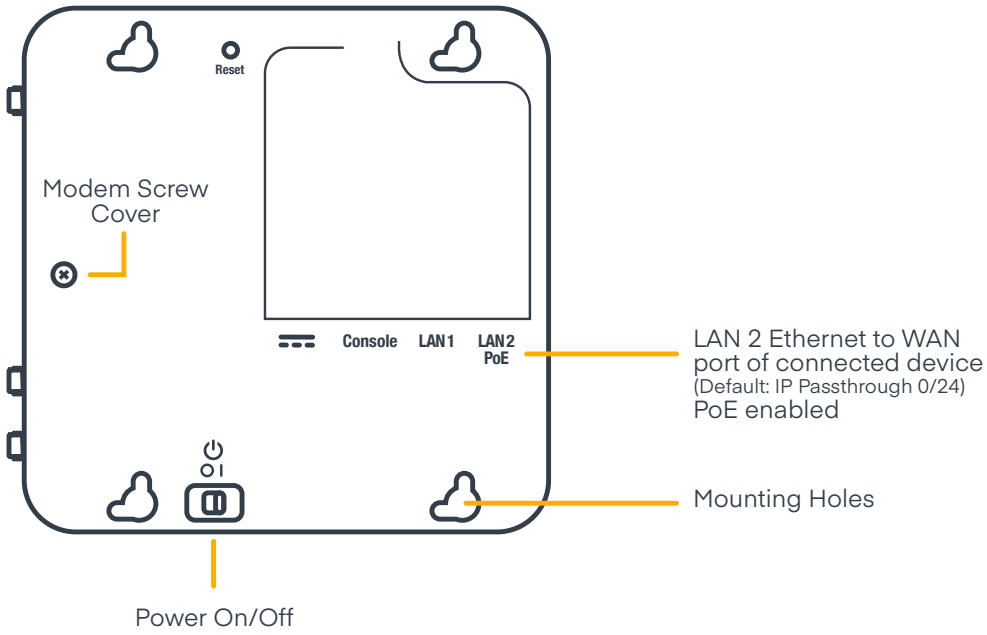
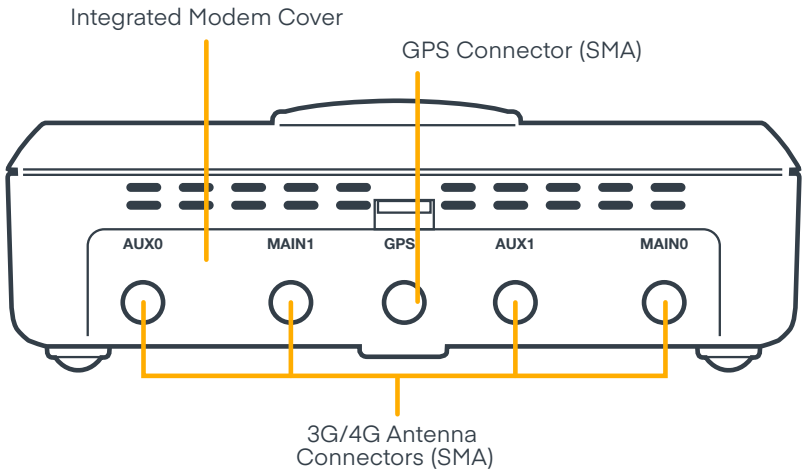
Hardware

CBA850

Bottom View



Right View



CBA850-1200M-B shown

1200M models = 2 MAIN, 2 AUX

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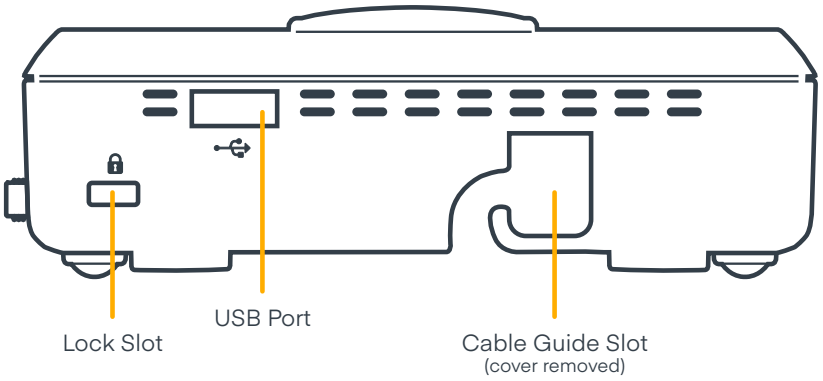
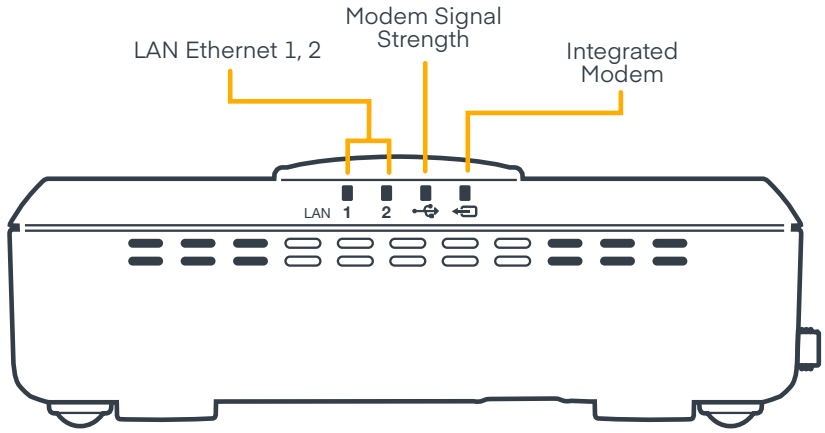
CBA850

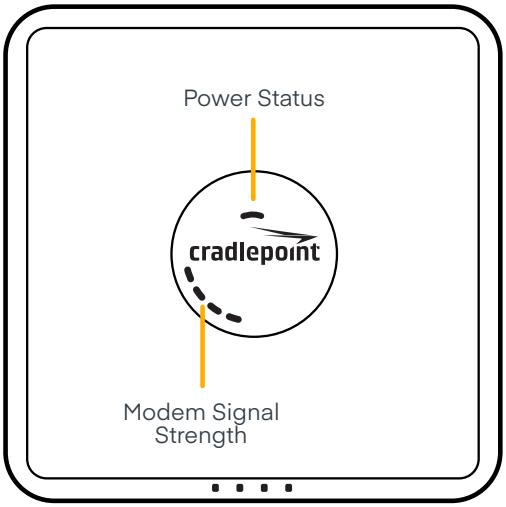
Rear View



Front View



Top View



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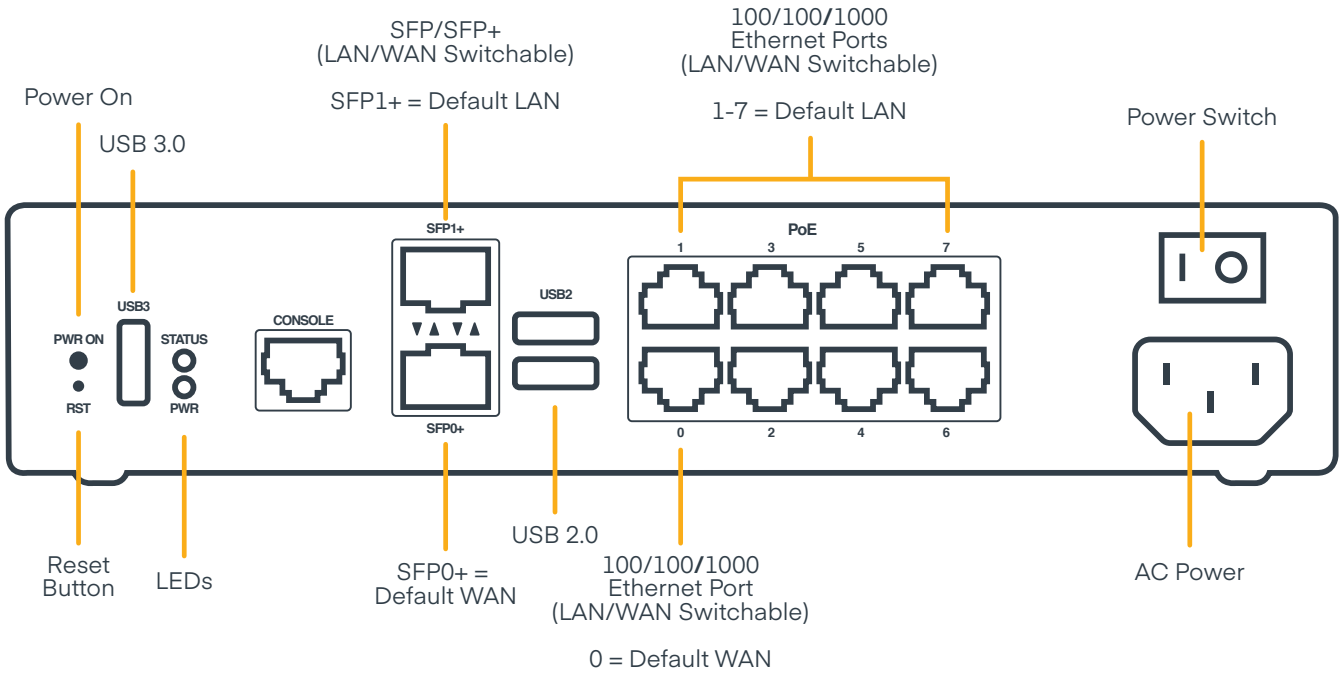
CR4250



Support & Warranty

The Branch Performance Package with CR4250-1200M-B is only sold as a component of NetCloud Packages.

- NetCloud Packages include support for the full subscription term.
- All Cradlepoint hardware products are covered by a limited lifetime warranty for as long as they are under a NetCloud Service Plan.

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LEDs

CBA850 LEDs	
Indicator	**Behavior**
	Power The Cradlepoint CBA850 must be powered using an approved 12 V DC power source. — Blue = Powered ON: 4G. — Green = Powered ON: 3G. — Amber = Attention. — No Light = Not receiving power. Check the power switch and the power source connection. **Signal Strength** Blue LED bars indicate the active modem's signal strength. — 4 Solid Bars = Strongest signal. — 1 Blinking Bar = Weakest signal. (A blinking bar indicates half of a bar.)
	Integrated Modem Indicates information about the integrated modem. — Green = Modem has established an active connection. — Blinking Green = Modem is connecting. — Amber = Modem is not active. — Blinking Amber = Data connection error. No modem connection possible. — Blinking Red = Modem is in the process of resetting.
	External USB Modem Indicates information about an attached USB modem. This indicator will not light up with the Captive Modem configuration and is, therefore, not used for the Branch Performance Package.

CR4250 LEDs & Indicators	
Indicator	**Behavior**
	Power: Input requirements 100-240V, 50-60Hz; 1.7A max w/o PoE, 4.1A max w/ POE. — Green = Powered ON and hardware OK. — No Light = Not receiving power. — Red = Critical hardware problem detected. Hardware problem means that, most likely, unit can not boot. This can happen when hardware component (RAM, CPU, Flash, etc) was found to have a critical issue and can't operate as expected. Contact Support.
Status	— LED Off - normal operation — Blinking Green (1Hz) - upgrade in progress OR a button is currently pressed — Blinking Green (4Hz) - shutdown in progress — Blinking Orange (4Hz) - factory reset in progress

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Buttons

Indicator	Behavior
Reset Button	— Press and hold for more than 7 seconds (status LED will be flashing orange at 4Hz when button is released). Customer configuration will be erased and unit will reboot. Customer entitlements will be preserved.
PWR On Button	— Press and hold for more than 3 seconds, but less than 7 (status LED will be flashing green at 4Hz when button released). Unit will send shutdown signal to all of its components and will safely power down. The PWR LED will turn RED before turning off completely. — Press and hold for more than 7 seconds. Unit will do the same thing as above, but will force shutdown of all components.

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