

Data Sheet

CBA550 Series LTE Adapter



Designed for remote sites that require secure, reliable failover connectivity in the event of a primary link disruption, the CBA550 Series LTE Adapter is a simple addition at the branch which significantly improves uptime and business continuity. These sophisticated devices can be configured at scale with NetCloud to offer a full range of zero-touch deployment, troubleshooting, and management features and integrate into existing configurations.

Notable Features

- Plug-and-play failover, adaptive to any networking and SD-WAN environment
- Embedded LTE with SIM-based Auto-Carrier Selection
- Power-over-Ethernet (PoE)
- External antenna options
- Cloud-managed for ease of deployment, remote management, and reporting

4G LTE for Failover Link Diversity

LTE wireless WANs provide a powerful, flexible, and cost-effective failover option to minimize disruption in the event of an outage. Working in conjunction with an existing router or SD-WAN, the CBA550 adapter establishes a cellular connection based on established failover policies. With this adapter, many remote location operations and applications continue functioning while in failover.

Day-1 Connectivity for Rapid Deployment

Establish secure network connections to get operations running while waiting for a wired connection. CBA550 adapters uniquely connect through LTE independently of the primary link so they do not require prior connection through wired networks. Cradlepoint wireless broadband solutions can be set up in hours with zero-touch deployment without IT staff on location, so local personnel can set up the network. Once the wired link is established, the CBA550 adapter falls into backup mode.

Performance

IP Passthrough
Mode Throughput

75 Mbps

Standard NAT
Mode Throughput

95 Mbps

Captive Modem
Mode Throughput

95 Mbps

Performance testing was conducted based on requirements as defined in RFC2544 using fixed-frame 1518 byte packets. Throughput results reflect unidirectional UDP traffic with less than 1% packet loss as tested with wired connections.

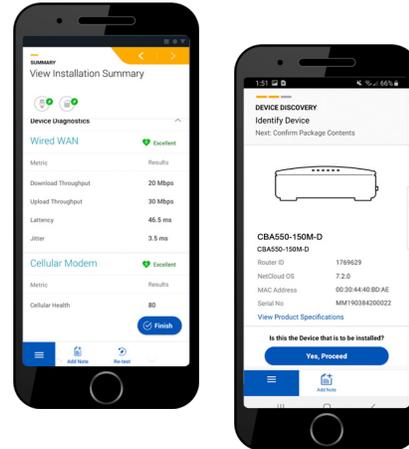
Results do not reflect performance of the cellular wireless operator networks.

Key Software Capabilities

The NetCloud Service provides everything needed to unlock the power of LTE at the network edge and connect devices to critical applications and services. It enables customers to build and manage wireless WANs with complete lifecycle management, true zero-touch deployment, and robust security. The service includes a warranty for as long as there is an active subscription on the router, online training, live and online support, and all software and firmware updates.

Cradlepoint Verify™ Mobile Application

As an extension to NetCloud, Cradlepoint Verify helps installers quickly and accurately install the CBA550 adapter for optimal LTE signal reception. Upon a verified installation, users receive a detailed report that includes installation pictures, speed test results, and modem health metrics.



Hardware Specifications

The following features are delivered through the hardware.

INTERFACES	
Modem:	Embedded LTE Category 4, 4G LTE — 2 x SMA cellular antenna connectors
Ethernet:	1 x 10/100 Ethernet ports
Wi-Fi:	N/A
GNSS/GPS:	N/A
ENVIRONMENTAL	
Temperature:	0 °C to 50 °C (32 °F to 122 °F) operating -20 °C to 70 °C (-4 °F to 158 °F) storage
Humidity:	10% to 85% operating 5% to 90% storage

PHYSICAL	
Size:	100 x 100 x 34 mm (3.9 x 3.9 x 1.33 in)
Weight:	0.18 kg (6.2 oz)
CERTIFICATIONS	
Safety:	UL/cUL, CB Scheme
Materials:	WEEE, RoHS, California Prop 65
LEDs	
Refer to the CBA550 Series LTE Adapter Quick Start Guide .	

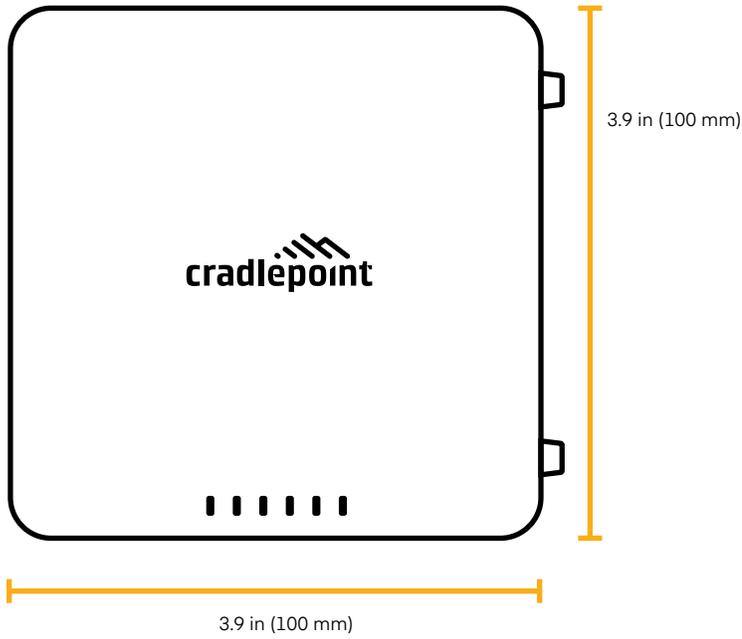
Enterprise-Class Modem Specifications

SPECIFICATION	CBA550-150M-D	CBA550-150M-E
Technology:	Category 4 LTE (3GPP Rel 8) — DC-HSPA+ — SIM-based auto-carrier selection	Category 4 LTE (3GPP Rel 8) — DC-HSPA+ — SIM-based auto-carrier selection
Fallback:	DL/UL FDD LTE with DC-HSPA+ (150/50 Mbps)	DL/UL FDD LTE with DC-HSPA+ (150/50 Mbps)
Carrier Aggregation:	N/A	N/A
Peak Downlink Rates:	LTE: 150 Mbps DC-HSPA+: 42 Mbps	LTE: 150 Mbps DC-HSPA+: 42 Mbps
Peak Uplink Rates:	LTE: 50 Mbps DC-HSPA+: 5.76 Mbps	LTE: 50 Mbps DC-HSPA+: 5.76 Mbps
MIMO:	2x2 MIMO	2x2 MIMO
QAM:	Up to 64	Up to 64
LTE Bands:	LTE FDD — B2, B4, B5, B12, B13, B14, B66, B71	LTE FDD — B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B25, B26, B28 LTE TDD — B38, B39, B40, B41
HSPA+ Bands:	B2, B4, B5	B1, B2, B4, B5, B6, B8, B19
Power:	LTE 23 dBm ± 1, DC-HSPA+ 23 dBm ± 1 (typical conducted)	LTE 23 dBm ± 2, DC-HSPA+ 23 dBm ± 1 (typical conducted)
Antennas:	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 2, included)	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 2, included)
GNSS/GPS:	N/A	N/A
SMS:	Yes	Yes
Regulatory:	FCC (U.S.), IC (Canada)	CE (EU), RCM (AU/NZ)
Network Operator Standards:	PTCRB (U.S., Canada)	GCF-CC (Worldwide), IDA (SG), SIRIM (MY), NOM/NYCE (MX)
Network Operator Certifications:	AT&T, T-Mobile, Verizon [†]	See note [†]
Public Safety Network Certifications:	FirstNet Ready™	N/A
Private Cellular Network:	N/A	N/A

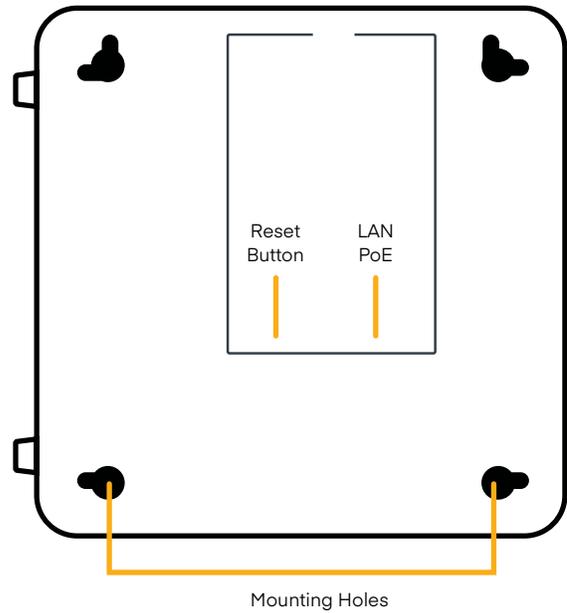
[†] Cellular carriers and operators throughout the world may only require telecom industry certifications, like PTCRB or GCF, to operate on their network. Some carriers require additional testing and approval, beyond telecom certifications. A carrier listed in the approvals section means Cradlepoint completed additional testing and acquired technical approval for that given carrier. Any carrier not listed may not require additional testing or approval beyond telecom industry certifications to operate on their network.

Hardware

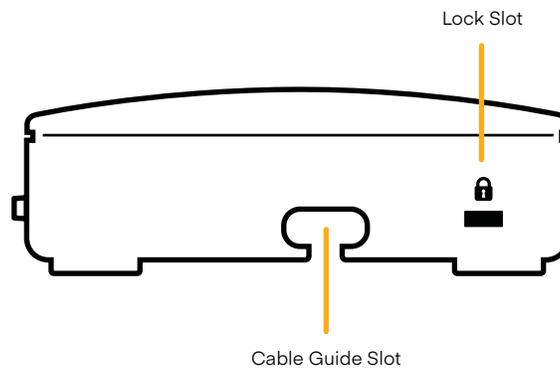
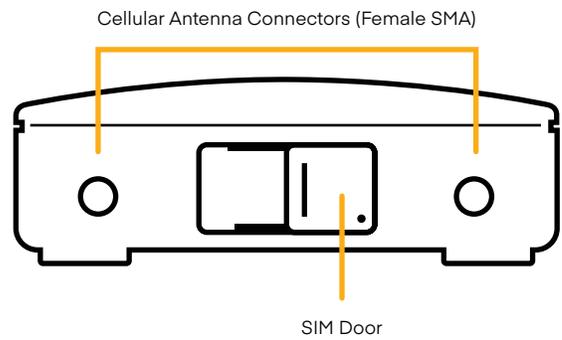
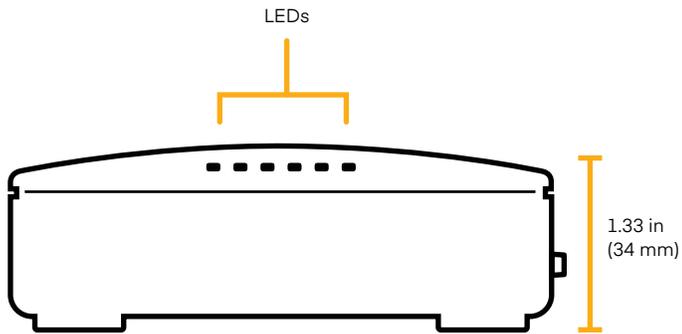
Physical Measurements



Bottom



Sides



Ordering Guide

NetCloud Branch LTE Essentials packages and plans are full featured for performance and connectivity. Essentials and Advanced packages include 24x7 support (phone support: 24 hour weekdays with emergency response on weekends, web: 24x7, chat: 24x5) and a limited lifetime warranty.

See additional details of what is included in the Essentials NetCloud software: cradlepoint.com/netcloud-service

For more details on the CB550 Series LTE Adapters, included with Essentials packages, see below.

NetCloud Package & Plans

REGION	DESCRIPTION	PART NUMBER
North America: U.S. & Canada	NetCloud Branch LTE Adapter Essentials Plan and CBA550 adapter (150M-D modem), North America	BBx-0550150M-N0N
International: Australia, European Union, Mexico, New Zealand, South Africa, Singapore & United Kingdom	NetCloud Branch LTE Adapter Essentials Plan and CBA550 adapter (150M-E modem), International	BBx-0550150M-G0M
All Regions	NetCloud Branch LTE Adapter Essentials Plan	BBx-NCESS
	NetCloud Branch LTE Adapter Advanced Plan	BBx-NCADV
	Renewal NetCloud Branch LTE Adapter Essentials Plan	BBx-NCESS-R
	Renewal NetCloud Branch LTE Adapter Essentials Plan and Advanced Plan	BBx-NCADV-R

x = 1, 3, or 5 years

Accessories

INCLUDED	PART NUMBER
Cellular Antenna, White mini, 600 MHz - 4.2 GHz, SMA, 145 mm (Qty. 2)	170765-000
SIM Door Screw	N/A
OPTIONAL	PART NUMBER
PoE Injector, 48 V, .35 A, 15.4 W, 1.8 meters (with C5 NA line cord)	170732-001
One of the following:	
— C5 Line Cord, 250 V, 1.8M, EU (Type F)	170733-000
— C5 Line Cord, 250 V, 1.8M, AU (Type I)	170733-001
— C5 Line Cord, 250 V, 1.8M, UK (Type G)	170733-002

Support & Warranty

The CBA550 Series LTE Adapters are only sold as components of NetCloud Branch LTE Adapter Essentials 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 have a subscription license to an active NetCloud Service Plan.

**Find the most up-to-date information
at cradlepoint.com/cba550**