

# Cradlepoint ARC CBA750B Series

# INTEGRATED MOBILE BROADBAND ADAPTER

Wireless WAN connectivity for distributed business locations



# Mobile Broadband to Ethernet Adapter

#### WIRELESS WAN CONNECTIVITY

The Cradlepoint CBA750B integrated mobile broadband series adapters enable easy-to-install wireless WAN connectivity in fixed-business locations. For distributed enterprises like branch offices, retail stores, restaurants, and small businesses, the CBA750B provides 3G/4G wireless network connectivity to keep your business up and running.

#### FAILOVER MADE SIMPLE

The Cradlepoint CBA750B 3G/4G cellular broadband adapter provides IP passthrough capabilities for any device that requires wireless broadband access. For most applications, simply connect the CBA750B to an existing CPE router configured for WAN failover, and it's ready to go. The CBA750B handles the wireless WAN connection through the integrated 3G/4G modem when failover occurs.

#### PRIMARY CONNECT IS EASY TOO

For temporary networks – or when wired connections are impractical – the CBA750B can serve as a primary-connect device, converting mobile broadband to Ethernet for point-of-sale tools, digital signs, and kiosks.

# **KEY FEATURES**

- Integrated 3G/4G mobile broadband connectivity
- · Drop into existing network for a turnkey failover solution
- · Remote management capabilities
- · Power-over-Ethernet
- IPv6 support

#### PERFORMANCE AND RELIABILITY

Engineered for day-in, day-out 24/7 Internet connectivity, the integrated business series products extend the benefits of WiPipe technology across the router and the modem, ensuring reliable connections when you need them. In router mode the CBA750B has access to most of Cradlepoint's powerful suite of routing capabilities. Power-over-Ethernet enables flexible mounting location, and external high-gain antennas ensure optimal performance in areas of low signal strength.

#### CRADLEPOINT ENTERPRISE CLOUD MANAGER

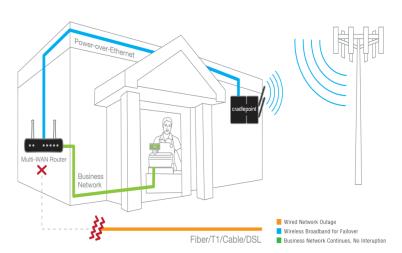
Rapidly deploy and dynamically manage networks at geographically distributed locations with Enterprise Cloud Manager, Cradlepoint's next generation application platform. Improve productivity, reduce costs, and enhance the intelligence of your network and business operations.

Subscription required. See cradlepoint.com/ecm for details.

# CRADLECARE SUPPORT

The CBA750B comes with a standard 1 year hardware warranty. For extended warranties and enterprise-level support, check out Cradlepoint's CradleCare suite of services.

Subscription required. See **cradlepoint.com/cradlecare** for details.



cradlepoint.com/ARCCBA750B

# ARC CBA750B Integrated Series Cellular Broadband Adapter

### Key Features and Benefits

The CBA750B seamlessly transfers the power and flexibility of 3G/4G mobile broadband connectivity to your local network for business applications.

#### Internet Access and Device Connectivity

Integrated high-speed 3G/4G modem – see attached specifications (non-integrated option available)

1 Ethernet LAN port for local Ethernet-enabled devices

Modem Health Management with 24x7 connection verification ensures the wireless connection will be there when you need it

### Security

SPI (stateful packet inspection) firewall and NAT (Network Address Translation) to prevent unwanted access to connected computers

Zone-based firewall

Variety of security features (URL filtering, IP & traffic filtering, DMZ, port forwarding) for safer Internet access

Advanced security mode and reporting to facilitate PCI-DSS compliance

802.1Q VLAN support to isolate, segment, and secure network traffic

#### **Flexibility**

First-time setup wizard for easy, swift, and secure setup

One-page dashboard to view router status and configuration

IP passthrough support provides broadband-to-Ethernet adapter; configure automatically with switch or setup wizard

Power-over-Ethernet – enables flexible location for convenience and best reception using existing CAT-5 cabling

Remote management with Cradlepoint Enterprise Cloud Manager

Multi-Carrier Software-Defined Radio with LPE models

SNMP v1/2c/3, CLI over SSH, and SMS

Data usage tracking with alerts to monitor data usage and avoid overages

Advanced diagnostics tools including: tcpdump, netfilter, traceroute

IPv6 support

Advanced APN management

Roaming control and ability to force 3G or 4G bands

Router services (e.g. Enterprise Cloud Manager) can be routed over LAN for devices in IP passthrough/failover mode – no data passed over 3G/4G connection

#### Support and Warranty

CradleCare Support available with technical support, software upgrades, and advanced hardware exchange  $-\,$  1, 3, and 5 year options

Limited 1 year warranty included with hardware repair or replacement – extend warranty to 2, 3, or 5 years

# **Specifications**

**WAN** Integrated modem; no modem option available – see below for SKU options

LAN One 10/100 Ethernet port

**TEMPERATURE** 0°C to 50°C (32°F to 122°F) Operating -20°C to 70°C (-4°F to 158°F) Storage

**RELATIVE HUMIDITY** (non-condensing) 10% to 85%, operating 5% to 90%, storage

SIZE 9 x 7.25 x 1.6 in (230 x 185 x 40 mm) (including integrated modem)

**WEIGHT** 1.5 lb (600g)

**CERTIFICATIONS** FCC, CE, IC, carrier (certifications depend on the specific model – see SKUs)

#### What's In The Box

CBA750B with integrated 3G/4G modem (no modem option available)

External mobile broadband modem antennas (2) (SMA) w/ multiplexing for GPS (on some models)

CAT5 Ethernet cable

12V / 1.5A power supply

Quick Start Guide with warranty information

#### **Accessories**

High-gain external antennas (Omni-directional, Patch, Yagi, 12" Magmount, 4" Mini mag-mount), see <a href="mailto:cradlepoint.com/CBA750B">cradlepoint.com/CBA750B</a> for more information

#### Requirements

Internet Service Active mobile broadband plan with cellular provider

**Browser** (to configure router) Minimum of Firefox v2.0, Internet Explorer v7.0, Chrome, or Safari v1.0

#### **Router Details**

**WAN Security** NAT, SPI, ALG, inbound filtering of IP addresses, port blocking, service filtering (FTP, SMTP, HTTP, RPL, SNMP, DNS, ICMP, NNTP, POP3, SSH), protocol filtering, WAN ping (allow/ignore)

Management Cradlepoint Enterprise Cloud Manager: cloud-enabled management and application platform (subscription-based); web-based GUI (local management), optional RADIUS or TACACS+ username/ password; remote WAN web-based management w/ access control (HTTP, HTTPS); SNMP v1, v2c & v3, CLI over SSH, SSH to serial, SSH to telnet, API; one-button firmware upgrade; modem configuration, update, and management; modem data usage and alerts, per-client data usage; custom AT scripting to modems; SMS

Intelligent Routing UPnP, DMZ, virtual server/port forwarding, routing rules, NAT-less routing, wireless WAN-to-LAN IP passthrough, route management, per-interface routing, content filtering, IP filtering, website filtering, per-client Web filtering, zone-based firewall, local DHCP server, DHCP client, DHCP relay, DNS, DNS proxy; ALGs: PPTP, L2TP, PPPoE passthrough, IPSec passthrough, FTP (passive), FTP (active), SIP, TFTP, IRC, MAC address filtering, Dynamic DNS, VLAN support (802.1Q), IPv6

**Performance & Health Monitoring** Modem Health Management (MHM) improves connectivity of modem, WAN port speed control, WAN failure detection, several levels of basic and advanced logging for troubleshooting

**GPS** Standalone GPS supported on most models (see attached); GUI mapping as well as local (LAN) or remote (WAN) server logging



# Ordering information

ARC CBA750B Bus	siness Series Routers
ARC CBA750B-LPE-VZ*	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+ / EVDO</b> wireless WAN connection for the Verizon network
ARC CBA750B-LPE-AT*	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+ / EVDO</b> wireless WAN connection for the AT&T network
ARC CBA750B-LPE-SP*	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+ / EVDO</b> wireless WAN connection for the AT&T network
ARC CBA750B-LP3-EU	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+</b> wireless WAN connection for the Europe network
ARC CBA750B-LPE-GN*	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+ / EVDO</b> wireless WAN connection (generic)
ARC CBA750B-LE-VZ	Business series router with dual-mode, high-performance <b>4G LTE / EVDO</b> wireless WAN connection for the Verizon network
ARC CBA750B-LP-AT	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+</b> wireless WAN connection for the AT&T network
ARC CBA750B-LE2-SP	Business series router with dual-mode, high-performance <b>4G LTE / EVDO</b> wireless WAN connection for the Sprint network
ARC CBA750B-LP2-EU	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+</b> wireless WAN connection for Europe
ARC CBA750B-LP	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+</b> wireless WAN connection (generic)
CBA750B	Cradlepoint's cellular broadband adapter – no integrated modem

<sup>\*</sup> LPE models include Multi-Carrier Software-Defined Radio technology which provides customers with the flexibility to remotely or locally expand their coverage options, reduce inventory risk, and future-proof their carrier networks.

Accessories (see Cradlepoint's antenna ordering and installation guide for more information)		
Part # 170587-000	Directional Patch antennas for external (outside) mounting	
Part # 170588-000	Directional Yagi (Log-Periodic) antennas for external (outside) mounting	
Part # 170586-000	Omni-directional antennas for external (outside) mounting	
Part # 170605-000	12" Mag-mount antenna	
Part # 170606-000	4" Mini mag-mount antenna	

# Ordering information

# **Cradlepoint** Enterprise Cloud Manager



# **DEPLOY AND MANAGE THE INTELLIGENT NETWORK**



Rapidly deploy and dynamically manage networks at geographically distributed locations with Enterprise Cloud Manager, Cradlepoint's next generation application platform. Improve productivity, reduce costs, and enhance the intelligence of your network and business operations.

- DEPLOYMENT configure devices by groups or individually, and update firmware easily with a few clicks.
- MANAGEMENT monitor device statuses in real-time and set proactive alerts for optimized 3G/4G data usage and network uptime.
- INTELLIGENCE view network analytics and manage security and PCI compliance.

Annual and multi-year licenses available. See cradlepoint.com/ecm for details.

CradleCare Support		
CradleCare Support	When your applications are mission critical, you need the assurance that only the CradleCare Support plan can provide, including unlimited technical support, software upgrades, and advanced hardware exchange – 1, 3, and 5 year plans available.	
CradleCare Extended Warranty	This plan represents an extension of the standard 1-year Cradlepoint warranty to 2, 3, or 5 years, with hardware repair/replacement.	

# ARC SERIES INTEGRATED MODEM SPECIFICATIONS: VERIZON

#### ARC CBA750B-LPE-VZ 4G LTE/HSPA+/EVDO for Verizon

Technology: LTE, HSPA+, EVDO Rev A

Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1

Mbps (theoretical)

**Uplink Rates**: LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 2 (1900 MHz), Band 4 AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)
- HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

**Power**: LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1, EVDO 24 dBm +0.5/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf-cm)

**GPS**: active GPS support

Industry Standards & Certs: FCC, Verizon

**Modem Part Number: MC400LPE** 

#### ARC CBA750B-LE-VZ

#### 4G/3G LTE/EVDO for Verizon

Technology: LTE, EVDO Rev A

Downlink Rates: LTE 100 Mbps, EVDO 3.1 Mbps (theoretical)

Uplink Rates: LTE 50 Mbps, EVDO 1.8 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 13 (700 MHz)
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

Power: LTE 23 dBm +/- 1, EVDO 24 dBm +/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; maximum torque spec is 7 kgf-cm

**GPS**: standalone GPS support

Industry Standards & Certs: FCC, Verizon

Modem Part Number: MC200LE

Please note that LPE models are flexible and support bands for multiple cellular providers; however, only the frequency bands in **bold** are supported by the listed provider.



# ARC SERIES INTEGRATED MODEM SPECIFICATIONS: AT&T

#### ARC CBA750B-LPE-AT 4G LTE/HSPA+/EVDO for AT&T

Technology: LTE, HSPA+, EVDO Rev A

Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1

Mbps (theoretical)

**Uplink Rates**: LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 2 (1900 MHz), Band 4 AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)
- HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

**Power**: LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1, EVDO 24 dBm +0.5/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf-cm)

**GPS**: active GPS support

Industry Standards & Certs: PTCRB, FCC, IC, AT&T

Modem Part Number: MC400LPE

#### ARC CBA750B-LP-AT

#### 4G/3G LTE/HSPA+ for AT&T

Technology: LTE, HSPA+

Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)

**Uplink Rates**: LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 17 (700 MHz), Band 4 (AWS)
- HSPA+/UMTS (850/1900/2100 MHz)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)

Power: LTE 23 dBm +/- 1, UMTS 23 dBm +/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; support for GPS on aux connection

**GPS**: standalone GPS support

Industry Standards & Certs: PTCRB, FCC, IC, AT&T

**Modem Part Number: MC200LP** 

Please note that LPE models are flexible and support bands for multiple cellular providers; however, only the frequency bands in **bold** are supported by the listed provider.



# ARC SERIES INTEGRATED MODEM SPECIFICATIONS: SPRINT

#### ARC CBA750LPE-SP 4G LTE/HSPA+/EVDO for Sprint

Technology: LTE, HSPA+, EVDO Rev A

Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1

Mbps (theoretical)

**Uplink Rates**: LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 2 (1900 MHz), Band 4 AWS (1700/2100 MHz), Band 5 (850MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)
- HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

**Power**: LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1, EVDO 24 dBm +0.5/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf-cm)

**GPS**: active GPS support

Industry Standards & Certs: FCC, Sprint

Modem Part Number: MC400LPE

#### ARC CBA750B-LE2-SP

#### 4G/3G LTE/EVDO for Sprint

Technology: LTE, EVDO Rev A

Downlink Rates: LTE 100 Mbps, EVDO 3.1 Mbps (theoretical)

**Uplink Rates**: LTE 50 Mbps, EVDO 1.8 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 25 (1900 MHz)
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

**Power**: LTE 23 dBm +/- 1, EVDO 24 dBm +/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; maximum torque spec is 7 kgf-cm

**GPS**: standalone GPS support

Industry Standards & Certs: FCC, Sprint

Modem Part Number: MC200LE2

Please note that LPE models are flexible and support bands for multiple cellular providers; however, only the frequency bands in **bold** are supported by the listed provider.



# ARC SERIES INTEGRATED MODEM SPECIFICATIONS: EUROPE

# ARC CBA750B-LP3-EU 4G LTE/HSPA+ for Europe

Technology: LTE, HSPA+

Downlink Rates: LTE 50 Mbps, HSPA+ 21.1 Mbps (theoretical)

Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 1 (2100 MHz), Band 3 (1800 MHz), Band 7 (2600 MHz), Band 8 (900 MHz). Band 20 (800 MHz)
- HSPA+/UMTS (800/850/900/1900/2100 MHz)
- GSM/GPRS/EDGE Quad Band (850/900/1800/1900 MHz)

**Power**: LTE Band 1/3/8/20 – 23 dBm +/– 1, LTE Band 7 – 22 dBm +/– 1, HSPA+ 23 dBm +/– 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only

**GPS**: active GPS support

Industry Standards & Certs: CE, GCF-CC

Modem Part Number: MC400LP3

# ARC CBA750B-LP2-EU 4G/3G LTE/HSPA+ for Europe

Technology: LTE, HSPA+

Downlink Rates: LTE 50 Mbps, HSPA+ 21.1 Mbps (theoretical)

Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)

#### Frequency Bands:

- LTE (800/900/1800/2100/2600 MHz)
- HSPA+/UMTS (900/2100 MHz)
- GSM/GPRS/EDGE (900/1800/1900 MHz)

Power: LTE 23 dBm +/- 1, UMTS 23 dBm +/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; support for GPS on aux connection

**GPS**: standalone GPS support

Industry Standards & Certs: CE, GCF-CC

Modem Part Number: MC200LP2

Cradlepoint products with the -EU SKUs enable and disable WiFi channels to comply with EU law. The -EU SKUs are required for use in Europe for products with 5 GHz WiFi, but these products are not legal for use in North America.



# ARC SERIES INTEGRATED MODEM SPECIFICATIONS: GENERIC

#### ARC CBA750B-LPE-GN\* 4G LTE/HSPA+/EVDO (generic)

Technology: LTE, HSPA+, EVDO Rev A

**Downlink Rates**: LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1

Mbps (theoretical)

**Uplink Rates**: LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 2 (1900 MHz), Band 4 (AWS), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)
- HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)
- CDMA EVDO Rev A/1xRTT (800/1900 MHz)

**Power**: LTE 23 dBm +/- 1, HSPA+ 23 dBm +/- 1, EVDO 24 dBm +0.5/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf-cm)

**GPS**: active GPS support

Industry Standards & Certs: PTCRB, FCC, IC

Modem Part Number: MC400LPE

# ARC CBA750B-LP

#### 4G/3G LTE/HSPA+ (generic)

Technology: LTE, HSPA+

Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)

**Uplink Rates**: LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)

#### Frequency Bands:

- LTE Band 17 (700 MHz), Band 4 (AWS)
- HSPA+/UMTS (850/1900/2100 MHz)
- GSM/GPRS/EDGE (850/900/1800/1900 MHz)

Power: LTE 23 dBm +/- 1, UMTS 23 dBm +/- 1 (typical conducted)

**Antennas:** two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; support for GPS on aux connection

**GPS**: standalone GPS support

Industry Standards & Certs: PTCRB, FCC, IC

Modem Part Number: MC200LP



<sup>\*</sup>For use on T-Mobile in the U.S. and Rogers, Bell, & TELUS in Canada