

# CradlePoint ARC MBR1400 Series

## INTEGRATED MOBILE BROADBAND ROUTER

Wireless WAN connectivity for distributed business locations



### Keep your business network online with high-speed wireless broadband

#### WIRELESS WAN CONNECTIVITY

CradlePoint ARC MBR1400 Series routers enable easy-to-install wireless connectivity in fixed-business locations. Ideal for distributed enterprises such as branch offices, retail POS locations, restaurants, and small businesses, the MBR1400 provides wired Ethernet and 3G/4G wireless WAN connectivity to keep your business up and running.

#### BUSINESS CONTINUITY

As businesses increasingly depend on cloud computing and remote applications, reliable Internet connectivity becomes mission-critical for business success. CradlePoint's integrated business series routers combine the power and flexibility of the MBR1400 router with an embedded business-grade wireless WAN modem for a fully-integrated business continuity solution (non-integrated option available).

#### ENTERPRISE PERFORMANCE

The ARC MBR1400 Series routers offer the latest in high-speed 3G/4G wireless connectivity to deliver the continuous uptime and bandwidth needed to support growth in cloud computing and ensure against loss of productivity and business opportunity.

#### SECURE AND RELIABLE

- LAN connections are protected with advanced WiFi encryption, LAN Segmentation, and VLAN capabilities.
- Main office access and POS transactions are protected by VPN capability and other security features to ensure your network stays secure.
- Designed for PCI compliant network architectures.
- Engineered for day-in, day-out 24/7 Internet connectivity, CradlePoint integrated business series routers ensure reliable connections when you need them.

#### FLEXIBLE

- Use the integrated 3G/4G wireless modem as the primary connection or as failover from a wired connection.
- Create secondary networks to simplify PCI compliance, video surveillance, digital signs, kiosks, etc.
- Load balance across multiple wired and wireless connections when additional bandwidth is required.
- Deploy IPv6

#### CRADLEPOINT ENTERPRISE CLOUD MANAGER

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

*Subscription required. See [cradlepoint.com/ecm](http://cradlepoint.com/ecm) for details.*

#### EXTENDED ENTERPRISE LICENSE

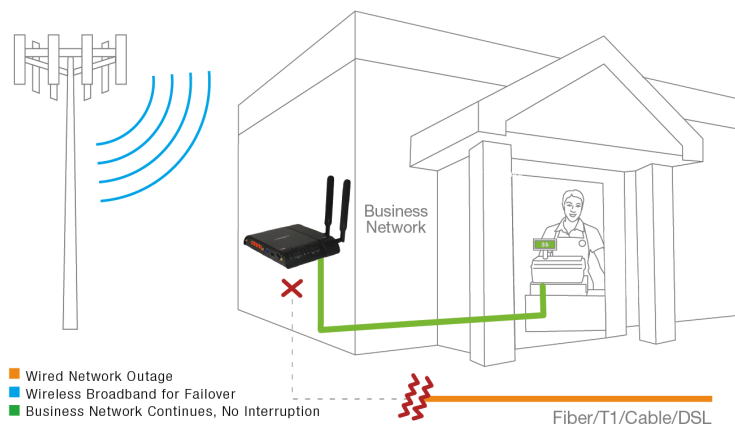
CradlePoint's Extended Enterprise License provides advanced routing and security features: BGP, OSPF, RIP, VRRP, STP, NHRP, OpenVPN (SSL VPN), L2TP, NEMO/DMNR, WPA2 Enterprise Authentication for WiFi as WAN, and seamless integration with Zscaler's secure web gateway.

*Subscription required. See [cradlepoint.com/eel](http://cradlepoint.com/eel) for details.*

#### CRADLE CARE SUPPORT AND SERVICES

The MBR1400 comes with a standard 1 year hardware warranty. For extended warranties and other enhanced services including enterprise-level support, site surveys, and expert installation, check out CradlePoint's CradleCare suite.

*Subscription required. See [cradlepoint.com/cradlecare](http://cradlepoint.com/cradlecare) for details.*



[cradlepoint.com/ARCMBR1400](http://cradlepoint.com/ARCMBR1400)

# ARC MBR1400 Integrated Mobile Broadband Router

## Key Features and Benefits

### Internet Access and Device Connectivity

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

5 Ethernet 10/100/1000 LAN/WAN ports for local devices or landline Internet

WiFi (802.11 a/b/g/n) supports up to 128 connections at a time

### Business Continuity

Automatic failover to wireless WAN connection when wired WAN disruption occurs, automatic fallback when wired WAN connection is restored

Load balancing across multiple wired and wireless WANs for more bandwidth

Proactive alerts when failover occurs through Enterprise Cloud Manager

VRRP for enterprise router redundancy<sup>1</sup>

### Flexibility

First-time and advanced setup wizards for easy, swift, and secure setup

One-page dashboard to view router status and configuration

Remote management with CradlePoint Enterprise Cloud Manager

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

Four SSIDs, with individual security and QoS settings, to separate critical traffic or create a public WiFi hotspot with a captive portal (terms of service, ads, etc.)

“WiFi as WAN” mode enables use as a WiFi repeater, WiFi Bridge, or as a WiFi-to-Ethernet adapter for Ethernet-enabled devices

Multiple Ethernet ports in LAN or WAN mode (failover, load balancing, etc.)

Data usage management and alerts to monitor data usage and avoid overages

LAN/WAN Affinity to assign specific LAN traffic to a WAN

Serial console for out-of-band management of another device (with USB-to-serial cable)

Enterprise routing protocols:<sup>1</sup> BGP, OSPF, RIP

Advanced diagnostics tools including: topdump, netfilter, traceroute

Network Mobility (NEMO) support for session continuity in mobile networks<sup>1</sup>

IPv6 support

Advanced APN management, roaming control, and ability to force 3G or 4G bands

### Security

IPsec VPN (up to 20 concurrent sessions) with GRE Tunneling option, also supports passthrough VPN connections (IPsec, L2TP, PPTP)

OpenVPN (SSL VPN)<sup>1</sup>

Layer 2 Tunneling Protocol (L2TP)<sup>1</sup>

WEP, WPA, WPA2, and AES encryption for secure WiFi

SPI (stateful packet inspection) firewall and NAT (network address translation) to prevent unwanted access to connected computers

Advanced security mode and reporting to facilitate PCI-DSS compliance

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

WPA2 Enterprise Authentication for WiFi as WAN<sup>1</sup>

Seamless integration with Zscaler's secure web gateway<sup>1</sup>

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

### Service, Support, and Warranty

CradleCare Support Agreement 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

CradleCare Site Survey and Installation services offered for rapid deployment

### Specifications

**WAN** Wireless WAN modem, 10/100/1000 Ethernet ports (cable/DSL/T1/satellite modems), WiFi (as WAN) 3x3 MIMO “N” 2.4 GHz or 5 GHz (802.11 a/b/g/n)

**LAN** WiFi (802.11 a/b/g/n), five 10/100/1000 Ethernet ports (WAN/LAN switchable), serial console support w/ USB-to-serial adapter

**TEMPERATURE** 0°C to 40°C (32°F to 104°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** 9x5.1x1.6 in (230x130x40 mm) or 9x7.25x1.6 in (230x185x40 mm)

**CERTIFICATIONS** FCC, WiFi Alliance, CE, IC, carrier certifications

**WIFI POWER** Transmit power: 25 dBm typ for all modes; receive sensitivity: –69 dBm typ (11n), –72 dBm typ (11g), –84 dBm typ (11b)

### What's In The Box

ARC MBR1400 with integrated business-class wireless WAN modem (no modem option available)

External 3G or 4G mobile broadband modem antennas (2) (SMA) w/ multiplexing for GPS (on some models), finger tighten only

External high-gain WiFi antennas (3) reverse SMA (5 dBi, 2.4 GHz), finger tighten only

12V / 1.5A power supply

Quick Start Guide with warranty information

### Requirements

**Internet Service** Active mobile broadband plan with cellular provider or Ethernet-based Internet connection (DSL, Cable, T1)

**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), 802.1x Ethernet port security<sup>2</sup>

**Redundancy and Load Balancing** Failover/failback with 4G, 3G, Ethernet with rule selection, advanced load balancing options (round robin, spillover, data usage, rate), WAN failure detection, VRRP<sup>1</sup>

**Intelligent Routing** UPnP, DMZ, virtual server/port forwarding, routing rules, NAT-less routing, wired or wireless WAN-to-LAN IP passthrough, route management, per-interface routing, content filtering, IP filtering, website filtering, per-client Web filtering, local DHCP server, DHCP client, DHCP relay,<sup>2</sup> DNS, DNS proxy; ALGs: PPTP, L2TP, PPPoE passthrough, IPsec passthrough, FTP (passive), FTP (active), SIP, TFTP, IRC, MAC address filtering, Dynamic DNS, LAN/WAN affinity, VLAN support (802.1Q), STP,<sup>1</sup> enterprise routing protocols:<sup>1</sup> BGP/OSPF/RIP, multicast proxy support,<sup>2</sup> IP setting overrides, IPv6

**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 w/ alerts, per-client data usage; custom AT scripting to modems; SMS

**Performance & Health Monitoring** WiPipe™ advanced QoS with traffic shaping, with DSCP/DiffServe QoS, Modem Health Management (MHM) improves connectivity of modem, SSID-based priority, WAN port speed control, several levels of basic and advanced logging for troubleshooting

**VPN** (IPsec) Tunnel, NAT-T, and transport modes; connect to CradlePoint, Cisco/Linksys, CheckPoint, Watchguard, Juniper, SonicWall, Adtran and others; certificate support; Hash (MD5, SHA128, SHA256, SHA384, SHA512), Cipher (AES, 3DES, DES); support for 20 concurrent connections, GRE tunneling, multiple networks supported in a single tunnel, site-to-site dynamic VPN with NHRP,<sup>1</sup> OpenVPN,<sup>1</sup> L2TP<sup>1</sup>

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

- 1) Requires an Extended Enterprise License and hardware version 2.0
- 2) Requires hardware version 2.0



## 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.

Annual and multi-year licenses available. See [cradlepoint.com/ecm](http://cradlepoint.com/ecm) for details.

ARC MBR1400 Integrated Business Series Routers	
ARC MBR1400LE-VZ	Business series router with dual-mode, high-performance <b>4G LTE / EVDO</b> wireless WAN connection for the Verizon network (802.11 a/b/g/n WiFi)
ARC MBR1400LP-AT	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+</b> wireless WAN connection for the AT&T network (802.11 a/b/g/n WiFi)
ARC MBR1400LE2-SP	Business series router with dual-mode, high-performance <b>4G LTE / EVDO</b> wireless WAN connection for the Sprint network (802.11 a/b/g/n WiFi)
ARC MBR1400LP2-EU	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+</b> wireless WAN connection for Europe (802.11 a/b/g/n WiFi)
ARC MBR1400LP	Business series router with dual-mode, high-performance <b>4G LTE / HSPA+</b> wireless WAN connection for Canada (802.11 a/b/g/n WiFi)
MBR1400	CradlePoint's mission-critical business series router with 802.11 a/b/g/n

CradleCare Support and Services	
CradleCare Support Agreement	When your applications are mission critical, you need the assurance that only the CradleCare Support Agreement 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.
CradleCare Standard 3G/4G Site Survey	Comprehensive carrier analysis for optimal performance: on-site engineer with proprietary site survey tool; 3G/4G RF testing on the major carriers; WiFi coverage testing; specified operating location; external antennas and POE testing; mapping and photos; data capture; report generation, including recommendations.
CradleCare Standard Installation	Deploy the experts to ensure a successful installation and operations: Installation Statement of Work (SOW); installation, mounting of CradlePoint equipment; installation of customer-specific equipment; cabling and mounting of antennas; extended wiring; configuration of all equipment; operational testing; report generation.

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

# ARC SERIES INTEGRATED MODEM SPECIFICATIONS: U.S. CARRIERS

ARC MBR1400LE-VZ	4G/3G LTE/EVDO for Verizon
<b>Technology:</b> LTE, EVDO Rev A	
<b>Downlink Rates:</b> LTE 100 Mbps, EVDO 3.1 Mbps (theoretical)	
<b>Uplink Rates:</b> LTE 50 Mbps, EVDO 1.8 Mbps (theoretical)	
<b>Frequency Bands:</b> <ul style="list-style-type: none"> <li>LTE Band 13 (700 MHz)</li> <li>CDMA EVDO Rev A/1xRTT (800/1900 MHz)</li> </ul>	
<b>Power:</b> LTE 23 dBm +/- 1, EVDO 24 dBm +/- 1 (typical conducted)	
<b>Module:</b> Sierra Wireless MC7750	
<b>Antennas:</b> two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; maximum torque spec is 7 kgf-cm	
<b>GPS:</b> standalone GPS support	
<b>Industry Standards &amp; Certs:</b> FCC, Verizon	
<b>Modem Part Number:</b> MC200LE	

ARC MBR1400LP-AT	4G/3G LTE/HSPA+ for AT&T
<b>Technology:</b> LTE, HSPA+	
<b>Downlink Rates:</b> LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)	
<b>Uplink Rates:</b> LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)	
<b>Frequency Bands:</b> <ul style="list-style-type: none"> <li>LTE Band 17 (700 MHz), Band 4 (AWS)</li> <li>HSPA+/UMTS (850/1900/2100 MHz)</li> <li>GSM/GPRS/EDGE (850/900/1800/1900 MHz)</li> </ul>	
<b>Power:</b> LTE 23 dBm +/- 1, UMTS 23 dBm +/- 1 (typical conducted)	
<b>Module:</b> Sierra Wireless MC7700	
<b>Antennas:</b> two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; support for GPS on aux connection	
<b>GPS:</b> standalone GPS support	
<b>Industry Standards &amp; Certs:</b> PTCRB, FCC, IC, AT&T	
<b>Modem Part Number:</b> MC200LP	

ARC MBR1400LE2-SP	4G/3G LTE/EVDO for Sprint
<b>Technology:</b> LTE, EVDO Rev A	
<b>Downlink Rates:</b> LTE 100 Mbps, EVDO 3.1 Mbps (theoretical)	
<b>Uplink Rates:</b> LTE 50 Mbps, EVDO 1.8 Mbps (theoretical)	
<b>Frequency Bands:</b> <ul style="list-style-type: none"> <li>LTE Band 25 (1900 MHz)</li> <li>CDMA EVDO Rev A/1xRTT (800/1900 MHz)</li> </ul>	
<b>Power:</b> LTE 23 dBm +/- 1, EVDO 24 dBm +/- 1 (typical conducted)	
<b>Module:</b> Sierra Wireless MC7355	
<b>Antennas:</b> two SMA male (plug); finger tighten only; maximum torque spec is 7 kgf-cm	
<b>GPS:</b> standalone GPS support	
<b>Industry Standards &amp; Certs:</b> FCC, Sprint	
<b>Modem Part Number:</b> MC200LE2	

# ARC SERIES INTEGRATED MODEM SPECIFICATIONS: INTERNATIONAL

ARC MBR1400LP2-EU    4G/3G LTE/HSPA+ for Europe
<b>Technology:</b> LTE, HSPA+
<b>Downlink Rates:</b> LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)
<b>Uplink Rates:</b> LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)
<b>Frequency Bands:</b> <ul style="list-style-type: none"><li>• LTE (800/900/1800/2100/2600 MHz)</li><li>• HSPA+/UMTS (900/2100 MHz)</li><li>• GSM/GPRS/EDGE (900/1800/1900 MHz)</li></ul>
<b>Power:</b> LTE 23 dBm +/- 1, UMTS 23 dBm +/- 1 (typical conducted)
<b>Module:</b> Sierra Wireless MC7710
<b>Antennas:</b> two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; support for GPS on aux connection
<b>GPS:</b> standalone GPS support
<b>Industry Standards &amp; Certs:</b> CE, GCF-CC
<b>Modem Part Number:</b> 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 MBR1400LP    4G/3G LTE/HSPA+ (generic)
<b>Technology:</b> LTE, HSPA+
<b>Downlink Rates:</b> LTE 100 Mbps, HSPA+ 21.1 Mbps (theoretical)
<b>Uplink Rates:</b> LTE 50 Mbps, HSPA+ 5.76 Mbps (theoretical)
<b>Frequency Bands:</b> <ul style="list-style-type: none"><li>• LTE Band 17 (700 MHz), Band 4 (AWS)</li><li>• HSPA+/UMTS (850/1900/2100 MHz)</li><li>• GSM/GPRS/EDGE (850/900/1800/1900 MHz)</li></ul>
<b>Power:</b> LTE 23 dBm +/- 1, UMTS 23 dBm +/- 1 (typical conducted)
<b>Module:</b> Sierra Wireless MC7700
<b>Antennas:</b> two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only; support for GPS on aux connection
<b>GPS:</b> standalone GPS support
<b>Industry Standards &amp; Certs:</b> PTCRB, FCC, IC
<b>Modem Part Number:</b> MC200LP