

# 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

The CradlePoint MBR1400 Integrated Business 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 CradlePoint ARC MBR1400 provides wired Ethernet and 3G/4G wireless WAN connectivity to keep your business up and running.

#### BUSINESS CONTINUITY

As businesses increasingly move to cloud computing and are more heavily dependent on remote applications, reliable Internet connectivity becomes mission-critical for business success. CradlePoint's Integrated Business Series Routers combine the power and flexibility of our flagship router with an embedded business-grade wireless WAN modem to provide a fully-integrated business continuity solution.

#### FLEXIBLE

- The integrated 3G/4G wireless modem can be used as failover for when the wired connection is disrupted, or as primary connect when wireline is not available or impractical.
- Create alternate networks off the main corporate network, such as public WiFi, to simplify PCI compliance, video surveillance, digital signs, kiosks, etc.
- Load balance across the wired and wireless connections when additional bandwidth is required.

#### SECURE AND RELIABLE

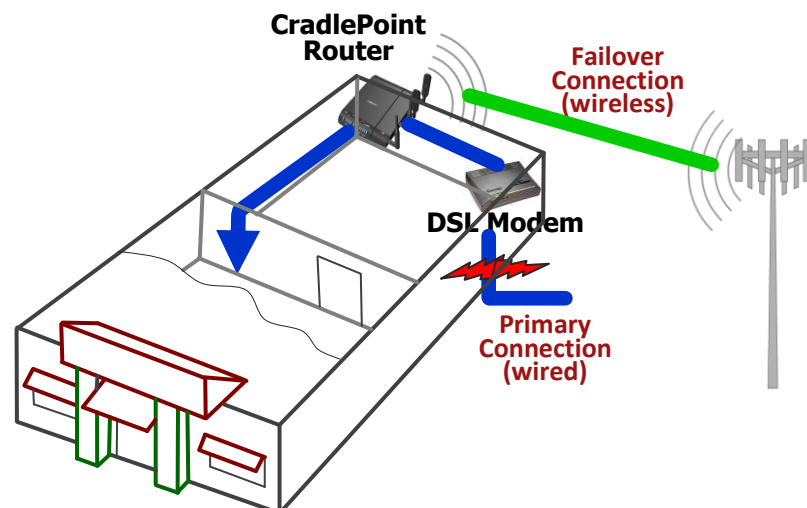
- LAN connections are protected with advanced WiFi encryption, LAN Segmentation, and VLAN capabilities.
- Main office access and POS transactions are protected by VPN capability, and other security features to ensure your network stays secure.
- Designed for PCI compliant network architectures.
- Engineered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

#### REMOTE MANAGEMENT, SERVICE AND SUPPORT

- WiPipe Central Remote Management Service enables remote configuration, firmware updates and reporting and provides alerts to monitor your network.
- In addition to the standard 1 year warranty, CradleCare Premier Enterprise Support Agreements are available.
- CradleCare Site Survey, to determine optimal connectivity and Installation Services for rapid deployment are also offered.

#### ENTERPRISE PERFORMANCE

CradlePoint ARC MBR1400 Integrated Business 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 insure against loss of productivity and business opportunity.



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

# ARC MBR1400 Integrated Mobile Broadband Router

## Key Feature and Benefits

### Internet Access and Device Connectivity

Integrated high-speed 3G/4G modem

- See attached for SKU options and specifications

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

Wireless LAN - WiFi (802.11 a/b/g/n) Supports up to 128 connections at a time

### Business Continuity: Failover/Failback

Automatic failover to Wireless WAN connection when wired WAN disruption occurs, automatic failback when wired WAN connection is restored

Load balancing across multiple wired and wireless WANs for more bandwidth

Proactive alerts when failover occurs through WiPipe Central™

### 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 WiPipe™ Central, SNMP v1,2,3 or CLI over SSH

Four SSIDs, with individual security and QoS settings, 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 can be configured to "WAN Mode" to provide wireless and wired failover and load balancing

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

### Security

IPsec VPN (up to 20 concurrent sessions) with GRE Tunneling Option, also supports pass-through VPN connections (IPSec, L2TP, PPTP)

WEP, WPA, WPA2 and AES encryption for secure WiFi

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

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

### Service, Support, and Warranty

CradleCare Premier 1, 2, and 3 year Enterprise Support Agreements available with 24/7 technical support, software upgrades and advanced hardware exchange

Limited 1 year warranty included, access to software updates and hardware repair or replacement. 2 and 3 year warranty extensions available

CradleCare Site Survey and Installation services offered for rapid deployment

## Specifications

**DATA IN:** Wireless WAN modem, 10/100/1000 Ethernet Ports (cable/DSL/T1/satellite modems), WiFi (as WAN) Wireless 3x3 MIMO "N" WiFi 2.5GHz or 5GHz (802.11 a/b/g/n)

**DATA OUT:** WiFi (802.11 a/b/g/n), Five 10/100/1000 Ethernet Ports (WAN/LAN Switchable)

**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:** 9x5.1x1.6in (230x130x40mm) or 9x7.25x1.6in (230x185x40mm)

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

**WIFI POWER:** Transmit Power: 25dBm typ for all modes  
Receive Sensitivity: -69dBm typ (11n), -72dBm typ (11g), -84dBm typ (11b)

## What's In The Box (Integrated Versions)

ARC MBR1400 with integrated business-class wireless WAN modem

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 (2dBi, 2.4GHz), 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)

**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

**Intelligent Routing** UPnP, DMZ, virtual server/port forwarding, routing rules, NAT-less routing, wired or wireless WAN-to-LAN IP pass-through, route management, per-interface routing, content filtering, IP filtering, website filtering, local DHCP server, DHCP client, DNS, DNS proxy. ALGs: PPTP, L2TP, PPPoE pass-through, IPSec pass-through, FTP (passive), FTP (active), SIP, TFTP, IRC, MAC address filtering, Dynamic DNS, LAN/WAN affinity, VLAN support (802.1Q)

**Management** WiPipe™ Central for remote configuration, updates, management and alerts (subscription-based); web-based GUI (local management); 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

**Performance & Health Monitoring** WiPipe™ advanced QoS with traffic shaping, 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. Device 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

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



One-year limited hardware warranty only available in the US and Canada. Product specifications are subject to change without notice. This product requires either an active subscription from a wireless service provider or Ethernet-based broadband service from an Internet service provider to receive internet service. Check with your broadband provider for service coverage, fees, and other charges. © 2012 CradlePoint, Inc. All rights reserved. CradlePoint, WiPipe™, and the WiPipe logo are trademarks of CradlePoint, Inc. in the US and other countries. Other trademarks are the property of their respective owners.

# Ordering information

## ARC MBR1400 Integrated Business Series Routers

ARC MBR1400LE-VZ	Business Series Router with dual-mode, high-performance 4G LTE / EVDO Wireless WAN connection for the Verizon Network, and 802.11 a/b/g/n
ARC MBR1400W	Business Series Router with high-performance WiMAX Wireless WAN connection for the Sprint or CLEAR Networks, and 802.11 a/b/g/n
ARC MBR1400LP-AT	Business Series Router with dual-mode, high-performance 4G LTE / HSPA+ Wireless WAN connection for the AT&T Network, and 802.11 a/b/g/n

## Remote Management

WiPipe™ Central Remote Management Software	<ul style="list-style-type: none"> <li>• Cloud-based remote management and monitoring tool that provides device status, manages firmware versions, and can configure all the settings on either individual or groups of devices in real-time.</li> <li>• Annual and multi-year license (s)</li> </ul>
--	---

## Enterprise Support Agreements

CradleCare Premium Enterprise Support Agreement	<p>When your applications are mission critical, you will need the assurance that only the CradleCare Premier plan can provide: 24-hour coverage every day, all year – including holidays. As a CradleCare Premier customer, you will be assigned a dedicated account engineer* for consistency and follow up on all your cases, with periodic case reviews provided.</p> <ul style="list-style-type: none"> <li>• Complete technical support, 24/7 coverage; Unlimited 24-hour Technical Support Center assistance; Extended warranty; Next-day parts replacement; Dedicated assigned Account Engineer*; Guaranteed response times; Online video based training sessions; Software bug fixes and upgrades; Advanced replacement; Access to CradlePoint Enterprise Advanced Services Knowledge Base and online documentation</li> </ul> <p><i>*Dedicated account engineer for customers with 50+ sites.</i></p>
CradleCare Warranty Extension	<p>This plan represents an extension of the standard 1-year CradlePoint warranty to 2 or 3 years.</p> <ul style="list-style-type: none"> <li>• One-Time Enterprise Technical Support; Software Bug Fixes; Access to CradlePoint Enterprise Services Knowledge base and Online Documentation; Hardware Repair/Replacement</li> </ul>

## Accessories (see CradlePoint's antenna ordering and installation guide for more information)

Part # 170587-000	Directional Patch antennas for external (outside) mounting (301157)
Part # 170588-000	Directional Yagi (Log-Periodic) antennas for external (outside) mounting (304411)
Part # 170586-000	Omni-directional antennas for external (outside) mounting (301202)

## BUSINESS-GRADE MODEM SPECIFICATIONS:

### ARC MBR1400LE-VZ 4G LTE/EVDO for Verizon

**Technology:** LTE 3GPP Rel. 8 , EVDO RevA, A/O; CDMA 1x

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

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

**Frequency Band:** LTE Band 13 (700MHz)

Cellular/PCS (800MHz/1,900 MHz)

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

**Module:** Sierra Wireless MC7750

**Antennas:** Two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain. Finger tighten only. Maximum torque spec is 7kgf-cm

**GPS:** standalone GPS support

**Industry Standards & Certs: Modem Model MC200LE:** Verizon, FCC

**Modem Certification Model Number:** MC200LE

**Modem Certification Part Number:** MC200LE-VZ

**Integrated Router Certification Part Number:** MBR1400LE-VZ

### ARC MBR1400LP-AT 4G/3G LTE/HSPA+ for AT&T

**Technology:** LTE/HSPA+ modem backwards compatible to GSM/GPRS/EDGE

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

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

**Frequency Band:** LTE Band 13 (700MHz) , Band 4 (AWS)

UMTS/HSPA+ (850/1900/2100 MHz)

EDGE/GPRS/GSM (850/900/1800/1900 MHz )

**Module Power:** LTE 23 +/-1dBm, UMTS 23 +/-1dBm (typ conducted)

**Module:** Sierra Wireless MC7700

**Antennas:** Two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain. w/ support for GPS on Aux connection, finger tighten only.

**GPS:** standalone GPS support

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

**Modem Certification Model Number:** MC200LP

**Modem Certification Part Number:** MC200LP-AT

### ARC MBR1400W 4G WiMAX for Sprint or CLEAR

**Technology:** WiMAX 802.16e Wave 2

**Downlink Rates:** 10Mbps peak, 6Mbps average

**Uplink Rates:** 5 Mbps peak, 1.2 Mbps average

**Frequency Band:** 2,500 MHz band

**Power:** 23.5 +/- 0.5 dBm (RSU/CPE)

**Module:** Beceem 250 chipset

**Antennas:** Two SMA male (plug), 5 dBi gain. Finger tighten only. Maximum torque spec is 7kgf-cm

**GPS:** No GPS support

**Industry Standards & Certs: Modem Model MC100W:** Sprint; Clearwire; FCC

**Modem Certification Model Number:** MC100W

**Modem Certification Part Number:** MC100W