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 our flagship router with an embedded business-grade wireless WAN modem for a fully-integrated business continuity solution.

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.

The MBR1400 now supports these enterprise routing protocols:* BGP, OSPF, and RIP; VRRP for router redundancy; and STP.

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.

*BGP, OSPF, RIP, VRRP, and STP require hardware version 2.0.

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.

WIPIPE CENTRAL: CLOUD-ENABLED MANAGEMENT

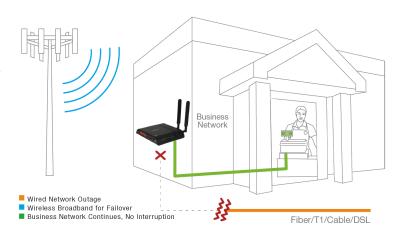
Rapidly deploy and dynamically manage networks at geographically distributed stores and branch locations with WiPipe Central, a cloud-enabled application and security platform. WiPipe Central integrates cloud management with your CradlePoint devices to improve productivity, increase reliability, reduce costs, and enhance the intelligence of your network and business operations.

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

CRADLECARE SERVICES

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

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



www.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

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™

VRRP for enterprise router redundancy (hardware version 2.0 only)

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 v1/2c/3, and CLI over SSH

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 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)

Enterprise routing protocols: BGP, OSPF, RIP (hardware version 2.0 only)

Advanced diagnostics tools including: tcpdump, netfilter, traceroute

Security

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

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

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

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/q/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

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 (2 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)

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*

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, 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,* enterprise routing protocols:* BGP/OSPF/RIP, multicast proxy support,* IP setting overrides

Management WiPipe Central™ 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

Performance & Health Monitoring WiPipe™ advanced QoS with traffic shaping, with DSCP/DiffServe QoS, Modern Health Management (MHM) improves connectivity of modern, 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*

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

*Requires hardware version 2.0



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 (802.11 a/b/g/n WiFi)	
ARC MBR1400LP-AT	Business series router with dual-mode, high-performance 4G LTE / HSPA+ wireless WAN connection for the AT&T network (802.11 a/b/g/n WiFi)	
ARC MBR1400W	Business series router with high-performance WIMAX wireless WAN connection for the Sprint or CLEAR networks (802.11 a/b/g/n WiFi)	

Cloud-Enabled Management and Application Platform

WiPipe Central

Rapidly deploy and dynamically manage networks at geographically distributed stores and branch locations with WiPipe Central, a cloud-enabled application and security platform. WiPipe Central integrates cloud management with your CradlePoint devices to improve productivity, increase reliability, 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 and set proactive alerts for optimized 3G/4G data usage and network uptime.
- Intelligence view network analytics, manage security and PCI compliance, and measure mobile customer traffic using WiFi analytics.

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

Enterprise Support Agreements

CradleCare Premium

When your applications are mission critical, you 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 an account engineer* for consistency and follow-up on all your cases, with periodic case reviews provided.

Complete technical support, 24/7 coverage; unlimited 24-hour technical support center
assistance; extended warranty; next-day parts replacement; 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.

*Account engineer for customers with 50+ sites.

CradleCare Warranty Extension

This plan represents an extension of the standard 1-year CradlePoint warranty to 2 or 3 years.

 One-time enterprise technical support; software bug fixes; access to CradlePoint Enterprise Advanced Services Knowledge Base and online documentation; hardware repair/replacement.

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	



BUSINESS-GRADE MODEM SPECIFICATIONS:

ARC MBR1400LE-VZ

4G 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 +/- 1 dBm, EVDO 24 +/- 1 dBm (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 7 kgf-cm

GPS: standalone GPS support

Industry Standards & Certs: FCC, Verizon

Modem Part Number: MC200LE-VZ

ARC MBR1400LP-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 +/- 1 dBm, UMTS 23 +/- 1 dBm (typical conducted)

Module: Sierra Wireless MC7700

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-AT

ARC MBR1400W 4G WiMAX for Sprint or CLEAR

Technology: WiMAX 802.16e Wave 2

Downlink Rates: 10 Mbps peak, 6 Mbps average

Uplink Rates: 5 Mbps peak, 1.2 Mbps average

Frequency Band: 2500 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 7 kgf-cm

GPS: no GPS support

Industry Standards & Certs: FCC, Sprint, CLEAR

Modem Part Number: MC100W